



M-Series: High-Temperature Connectors



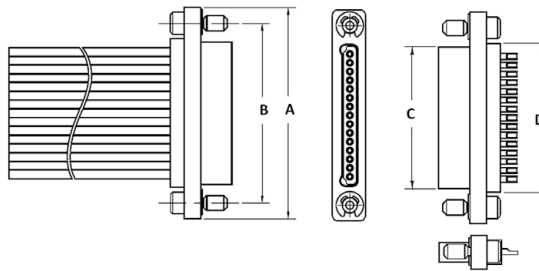
M

MICRO
0.050"
(1.27 mm)

MMHT – Single-Row I/O Cable (Male)

MMHT interconnects are used in rigorous, high-temperature applications and have a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



| DIMENSIONS | | | | |
|------------|-------|-------|---------|-------|
| SIZE | A | B | C (MAX) | D |
| 4 | .655 | .475 | .260 | .297 |
| 5 | .705 | .525 | .310 | .347 |
| 6 | .755 | .575 | .360 | .397 |
| 9 | .905 | .725 | .510 | .547 |
| 12 | 1.055 | .875 | .660 | .697 |
| 15 | 1.205 | 1.025 | .810 | .847 |
| 21 | 1.505 | 1.325 | 1.110 | 1.147 |
| 25 | 1.705 | 1.525 | 1.310 | 1.347 |

ORDER FORM

Sample Part Number Format: **MMHT-112-015-161-41WQ**

| | | | | | | | | |
|---|--|---|---|---|---|--|--|---|
| MMHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Rugged Metal I/O Connector (Male) | ROWS 1 – 1-Row (4-25 contacts) | BODY STYLE 1 – Plug, straight | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 5 – High-temp with stainless steel shell | SIZE 004 – 4 Contacts 005 – 5 Contacts 006 – 6 Contacts 009 – 9 Contacts 012 – 12 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts | PLATING 1 – 50 μ" Au contacts 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 1A – Pin, straight, 24 awg solder cup 11 – Pin, straight, 26 awg solder cup 1E – Pin, straight, 0.125" lead length* 13 – Pin, straight, 0.250" lead length* 14 – Pin, straight, 0.500" lead length* 16 – Pin, straight, crimped wire | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies 41 – Two turning jackscrews, allen head 45 – Two turning jackscrews, allen head, captivated** | WIRING 00 – None XX – See Wiring Codes |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable

MMHT-112-015-161-41WQ

High-Reliability Contact

MIL-DTL-83513

MATERIALS and FINISHES

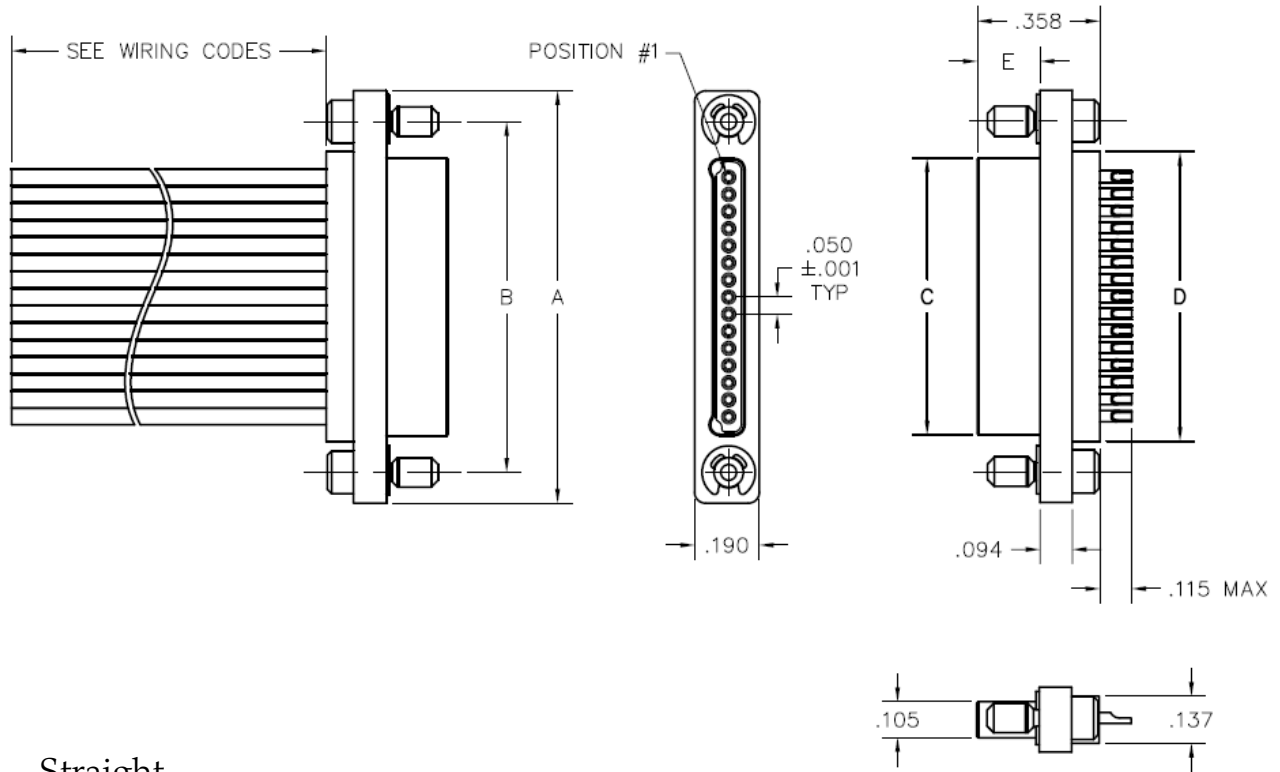
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" un-insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MMHT SINGLE-ROW MALE DRAWINGS



Straight
 Single-Row
 Cable-to-Cable

| DIMENSIONS | | | | | | |
|------------|-------|-------|---------|-------|---------|--|
| SIZE | A | B | C (MAX) | D | E (MAX) | HW |
| 4 | .655 | .475 | .260 | .297 | .186 | #2-56 UNC THD (Ø.092 THRU) |
| 5 | .705 | .525 | .310 | .347 | | |
| 6 | .755 | .575 | .360 | .397 | | |
| 9 | .905 | .725 | .510 | .547 | | |
| 12 | 1.055 | .875 | .660 | .697 | | |
| 15 | 1.205 | 1.025 | .810 | .847 | | |
| 21 | 1.505 | 1.325 | 1.110 | 1.147 | | |
| 25 | 1.705 | 1.525 | 1.310 | 1.347 | | |

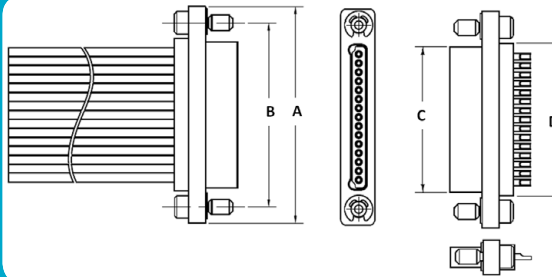
PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



MMHT – Single-Row I/O Cable (Female)

MMHT interconnects are used in rigorous, high-temperature applications and have a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



| DIMENSIONS | | | | |
|------------|-------|-------|---------|-------|
| SIZE | A | B | C (MAX) | D |
| 4 | .655 | .475 | .260 | .297 |
| 5 | .705 | .525 | .310 | .347 |
| 6 | .755 | .575 | .360 | .397 |
| 9 | .905 | .725 | .510 | .547 |
| 12 | 1.055 | .875 | .660 | .697 |
| 15 | 1.205 | 1.025 | .810 | .847 |
| 21 | 1.505 | 1.325 | 1.110 | 1.147 |
| 25 | 1.705 | 1.525 | 1.310 | 1.347 |

ORDER FORM

Sample Part Number Format: **MMHT-122-015-261-22WQ**


| | | | | | | | | |
|---|--|---|---|---|---|--|--|---|
| MMHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Rugged Metal I/O Connector (Female) | ROWS 1 – 1-Row (4-25 contacts) | BODY STYLE 2 – Receptacle, straight | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 5 – High-temp with stainless steel shell | SIZE 004 – 4 Contacts 005 – 5 Contacts 006 – 6 Contacts 009 – 9 Contacts 012 – 12 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts | PLATING 1 – 50 μ" Au contacts 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 2A – Socket, straight, 24 awg solder cup 21 – Socket, straight, 26 awg solder cup 2E – Socket, straight, 0.125" lead length* 23 – Socket, straight, 0.250" lead length* 24 – Socket, straight, 0.500" lead length* 26 – Socket, straight, crimped wire | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies 41 – Two turning jackscrews, allen head 45 – Two turning jackscrews, allen head, captivated** | WIRING 00 – None XX – See Wiring Codes |

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NOTES

- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable

MMHT-122-015-261-22WQ



High-Reliability Contact

MIL-DTL-83513

MATERIALS and FINISHES

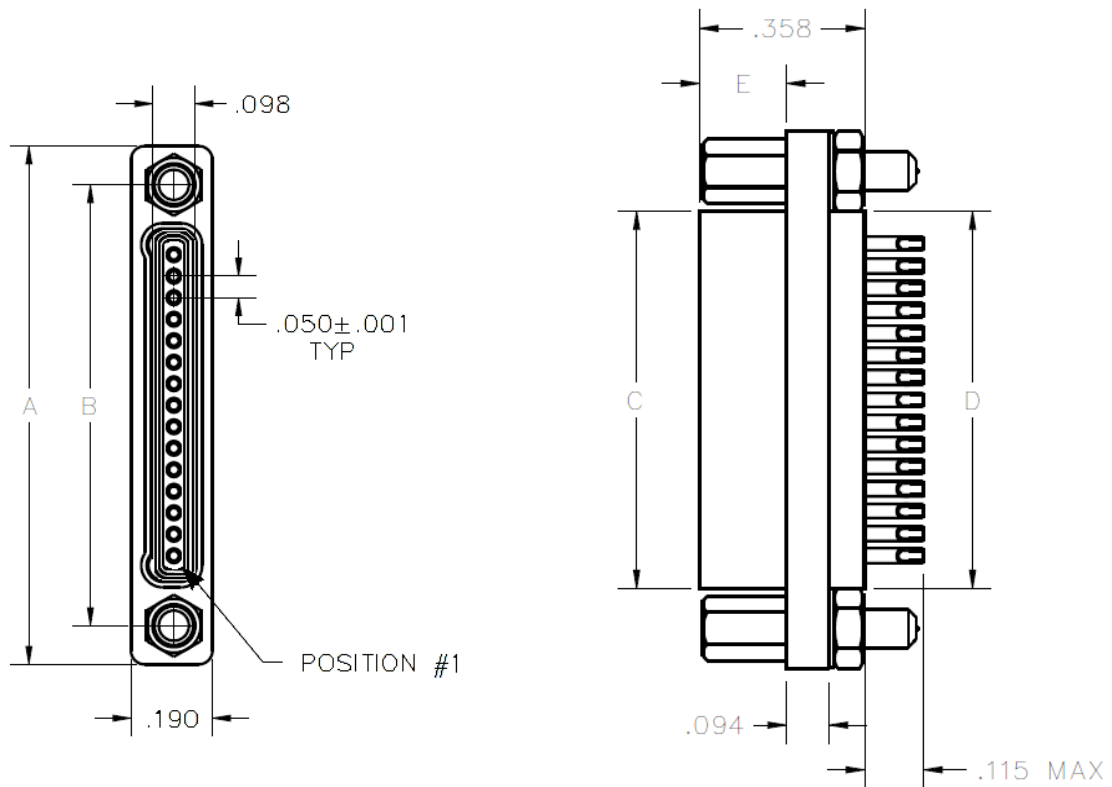
Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

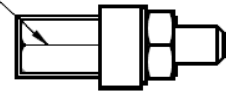
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MMHT SINGLE-ROW FEMALE DRAWINGS



Straight
 Single-Row
 Cable-to-Cable

#2-56 JACKPOST
 (2 PLCS)



| DIMENSIONS | | | | | | |
|------------|-------|-------|---------|-------|---------|--|
| SIZE | A | B | C (MAX) | D | E (MAX) | HW |
| 4 | .655 | .475 | .263 | .297 | .198 | #2-56 UNC THD (Ø.092 THRU) |
| 5 | .705 | .525 | .313 | .347 | | |
| 6 | .755 | .575 | .363 | .397 | | |
| 9 | .905 | .725 | .513 | .547 | | |
| 12 | 1.055 | .875 | .663 | .697 | | |
| 15 | 1.205 | 1.025 | .813 | .847 | | |
| 21 | 1.505 | 1.325 | 1.113 | 1.147 | | |
| 25 | 1.705 | 1.525 | 1.313 | 1.347 | | |

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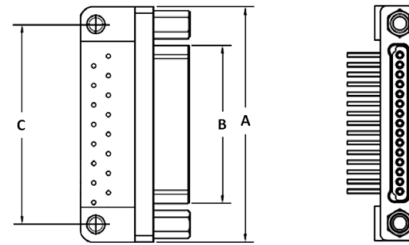
M **MICRO**
 0.050"
 (1.27 mm)



MKHT – Single-Row, Right Angle Board-Mount (Male)

MKHT interconnects are used in rugged, high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save space on the board.

DIMENSIONS



Please reference MKHTM-DIM-1 for more detail.

| SIZE | DIMENSIONS | | | MOUNTING HOLE |
|------|------------|---------|-------|---------------------------------|
| | A | B (MAX) | C | |
| 4 | .655 | .260 | .475 | #2-56 UNC THREADED INSERT |
| 5 | .705 | .310 | .525 | |
| 6 | .755 | .360 | .575 | |
| 9 | .905 | .510 | .725 | |
| 12 | 1.055 | .660 | .875 | |
| 15 | 1.205 | .810 | 1.025 | |
| 21 | 1.505 | 1.110 | 1.325 | |
| 25 | 1.705 | 1.310 | 1.525 | |

ORDER FORM

Sample Part Number Format: **MKHT-152-015-325-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|---|--|---|---|---|--|--|--|--|
| MKHT | | | | | | | | |
| SERIES 0.050" Rugged Metal Right Angle PTH Connector (Male) | ROWS 1 – 1-Row (4-25 contacts) | BODY STYLE 5 – Plug, right angle, standard footprint with thread insert | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 5 – High-temp with stainless steel shell | SIZE 004 – 4 Contacts 005 – 5 Contacts 006 – 6 Contacts 009 – 9 Contacts 012 – 12 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts | CONTACT/TERMINATION TYPE 32 – Pin, right angle, 0.109" x 0.020" dia 33 – Pin, right angle, 0.140" x 0.020" dia 34 – Pin, right angle, 0.172" x 0.020" dia A2 – Pin, right angle, 0.109" x 0.020" dia with ground pin option A3 – Pin, right angle, 0.140" x 0.020" dia with ground pin option A4 – Pin, right angle, 0.172" x 0.020" dia with ground pin option | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | WIRING 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MATERIALS and FINISHES

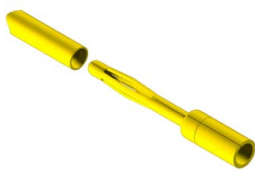
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

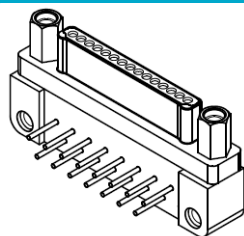
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MKHT-152-015-325-220S

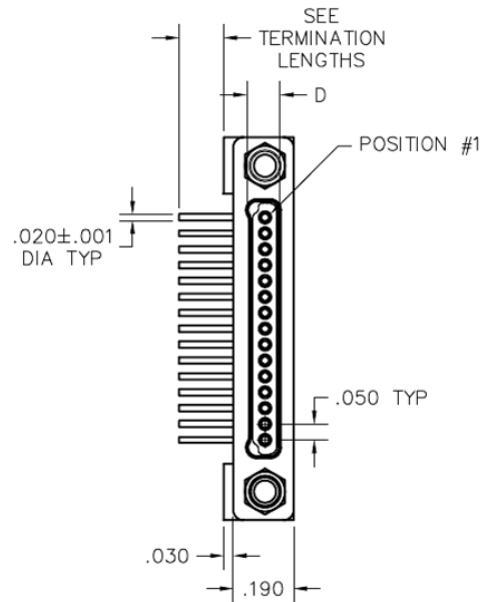
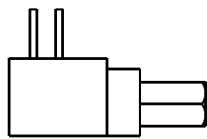
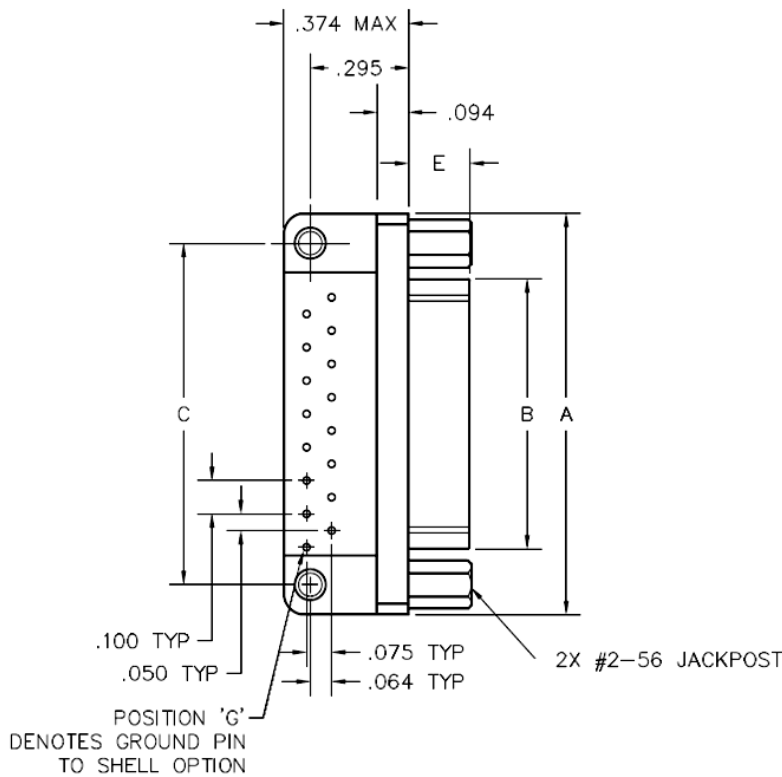


High-Reliability Contact

MIL-DTL-83513



MKHT SINGLE-ROW MALE DRAWINGS



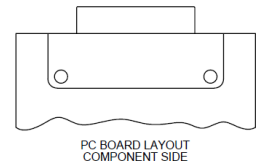
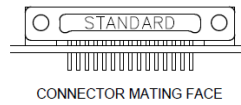
Right Angle
 Narrow Footprint
 Threaded Inserts
 Interfacial Seal

| DIMENSIONS | | | | | | |
|------------|-------|---------|-------|---------|---------|---------------------------------|
| SIZE | A | B (MAX) | C | D (MAX) | E (MAX) | MOUNTING HOLE |
| 4 | .655 | .260 | .475 | .110 | .186 | #2-56 UNC THREADED INSERT |
| 5 | .705 | .310 | .525 | | | |
| 6 | .755 | .360 | .575 | | | |
| 9 | .905 | .510 | .725 | | | |
| 12 | 1.055 | .660 | .875 | | | |
| 15 | 1.205 | .810 | 1.025 | | | |
| 21 | 1.505 | 1.110 | 1.325 | | | |
| 25 | 1.705 | 1.310 | 1.525 | | | |

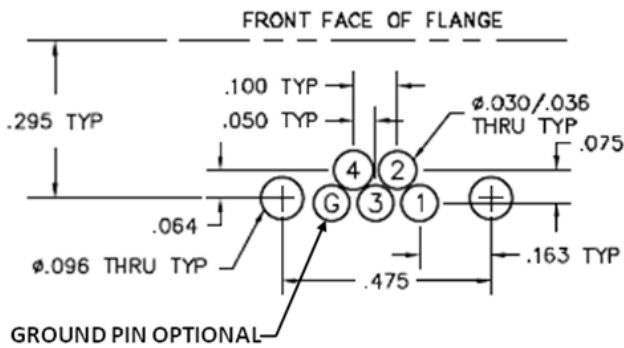
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Recommended PC Board Layouts – MKHT Male

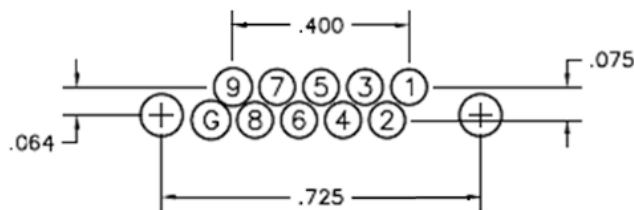
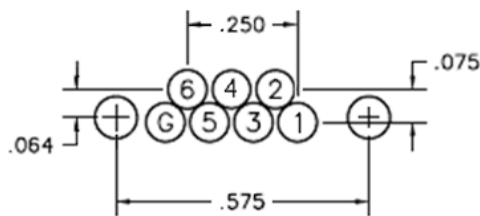
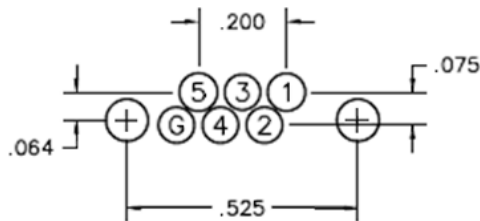
Right Angle
 Single Row
 Standard Polarization
 Sizes 4–9



**PC BOARD LAYOUT
 COMPONENT SIDE**

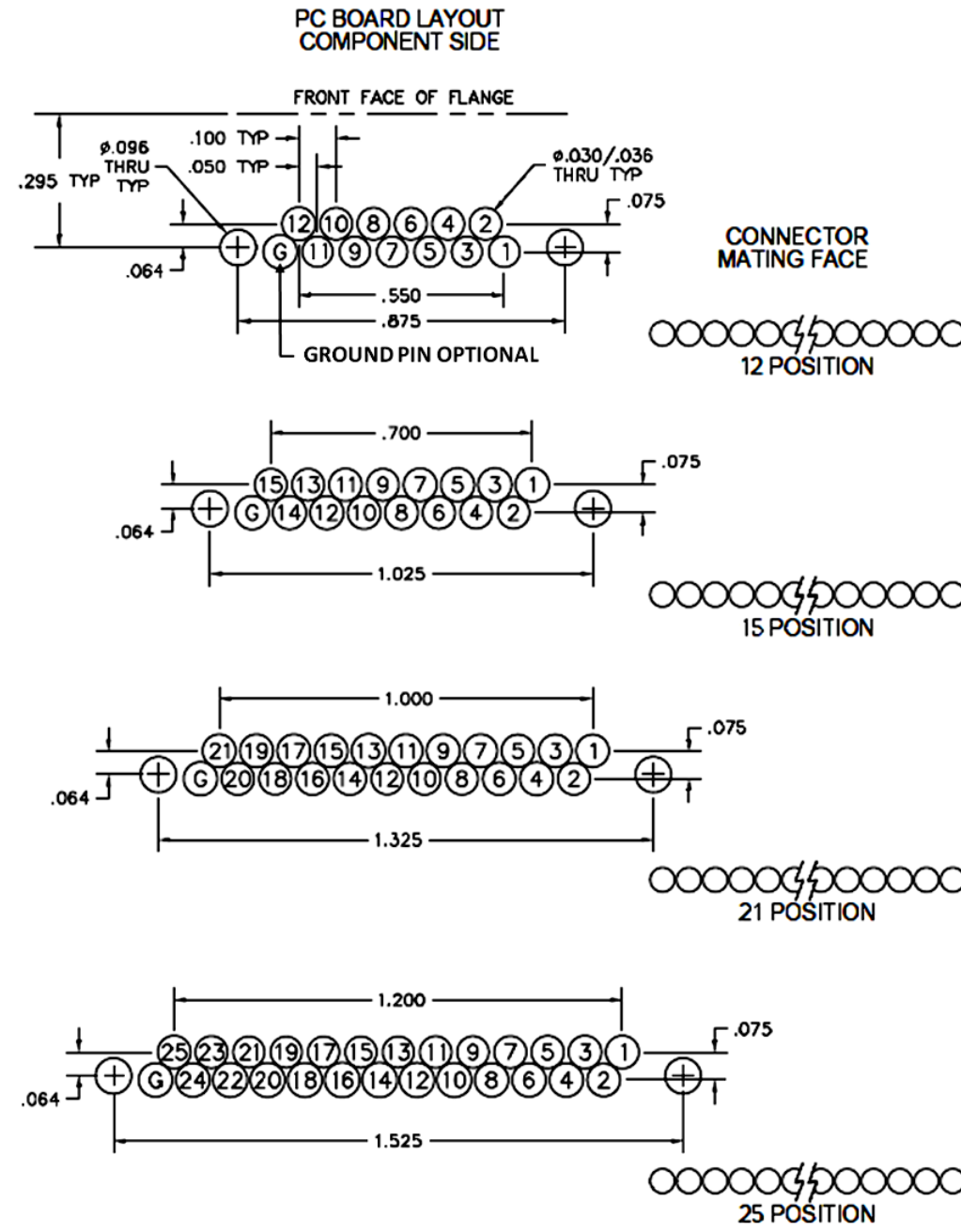
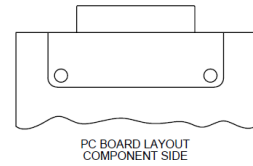
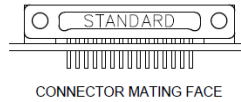


**CONNECTOR
 MATING FACE**



Recommended PC Board Layouts – MKHT Male

Right Angle
 Single Row
 Standard Polarization
 Sizes 12–25

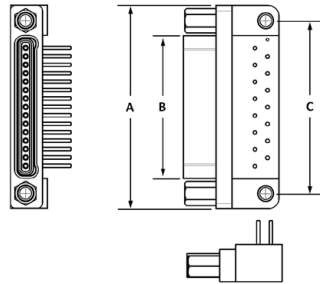




MKHT – Single-Row, Right Angle Board-Mount (Female)

MKHT interconnects are used in rugged, high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save space on the board.

DIMENSIONS



| DIMENSIONS | | | | |
|------------|-------|---------|-------|---------------------------|
| SIZE | A | B (MAX) | C | MOUNTING HOLE |
| 4 | .655 | .297 | .475 | #2-56 UNC THREADED INSERT |
| 5 | .705 | .347 | .525 | |
| 6 | .755 | .397 | .575 | |
| 9 | .905 | .547 | .725 | |
| 12 | 1.055 | .697 | .875 | |
| 15 | 1.205 | .847 | 1.025 | |
| 21 | 1.505 | 1.147 | 1.325 | |
| 25 | 1.705 | 1.347 | 1.525 | |

Please reference MKHTF-DIM-1 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-162-015-435-220S**

| | | | | | | | | |
|---|--|---|---|---|--|--|--|--|
| MKHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Rugged Metal Right Angle PTH Connector (Female) | ROWS 1 – 1-Row (4-25 contacts) | BODY STYLE 6 – Receptacle, right angle, standard footprint with thread inserts and interfacial seal | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 5 – High-temp with stainless steel shell | SIZE 004 – 4 Contacts 005 – 5 Contacts 006 – 6 Contacts 009 – 9 Contacts 012 – 12 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia 44 – Socket, right angle, 0.140" x 0.020" dia 45 – Socket, right angle, 0.172" x 0.020" dia B3 – Socket, right angle, 0.109" x 0.020" dia with ground pin option B4 – Socket, right angle, 0.140" x 0.020" dia with ground pin option B5 – Socket, right angle, 0.172" x 0.020" dia with ground pin option | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | WIRING 0S – Standard body polarization |

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NOTES

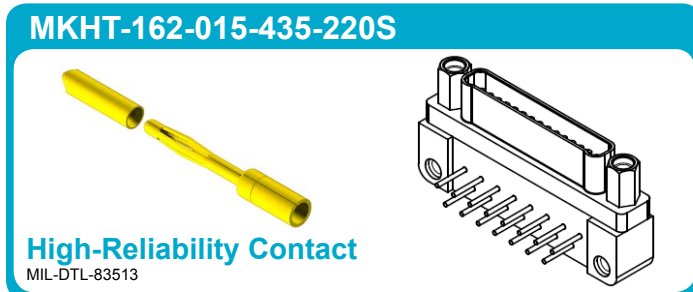
MATERIALS and FINISHES

Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

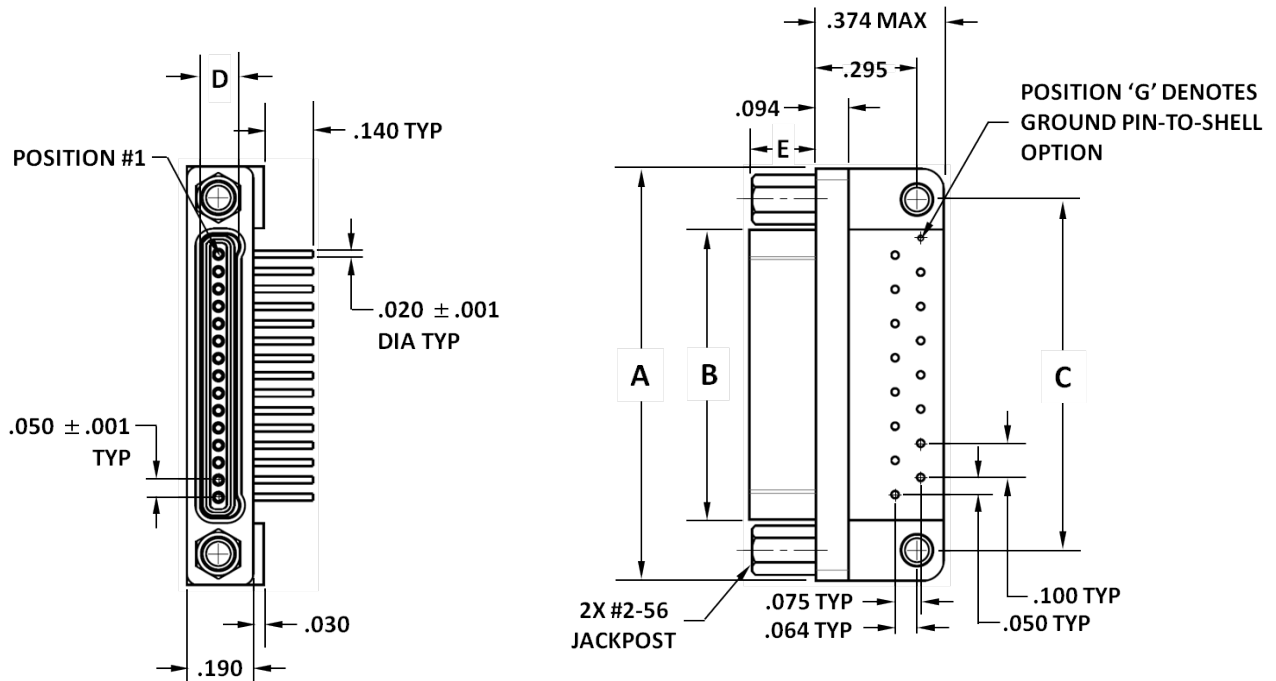
NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact



MKHT SINGLE-ROW FEMALE DRAWINGS



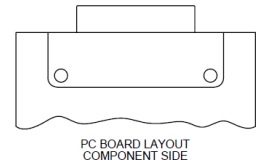
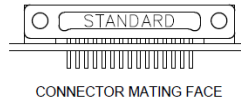
Right Angle
 Narrow Footprint
 Threaded Inserts
 Interfacial Seal

| DIMENSIONS | | | | | | |
|------------|-------|---------|-------|---------|---------|---------------------------------|
| SIZE | A | B (MAX) | C | D (MAX) | E (MAX) | MOUNTING HOLE |
| 4 | .655 | .297 | .475 | .142 | .198 | #2-56 UNC THREADED INSERT |
| 5 | .705 | .347 | .525 | | | |
| 6 | .755 | .397 | .575 | | | |
| 9 | .905 | .547 | .725 | | | |
| 12 | 1.055 | .697 | .875 | | | |
| 15 | 1.205 | .847 | 1.025 | | | |
| 21 | 1.505 | 1.147 | 1.325 | | | |
| 25 | 1.705 | 1.347 | 1.525 | | | |

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Recommended PC Board Layouts – MKHT Female

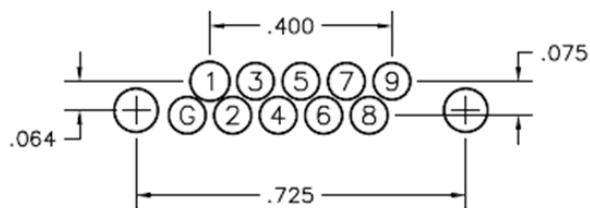
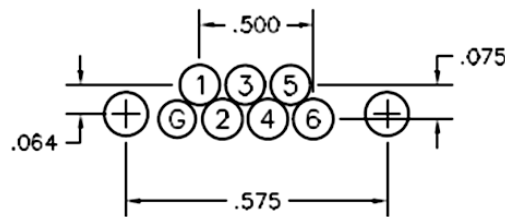
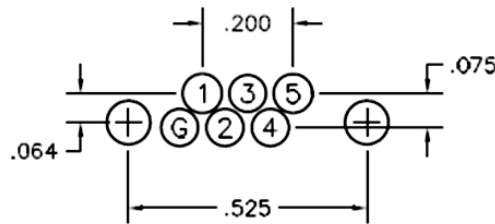
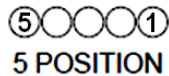
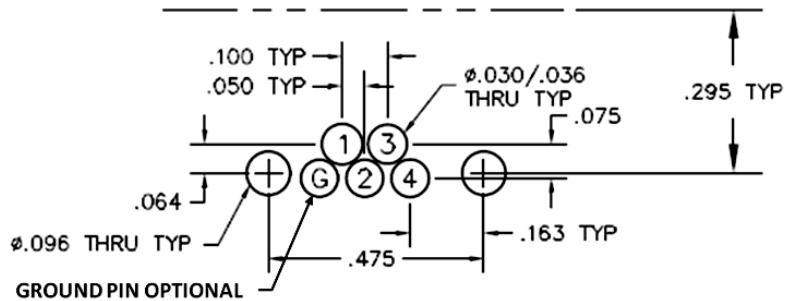
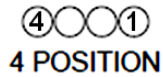
Right Angle
 Single Row
 Standard Polarization
 Sizes 4–9



CONNECTOR
 MATING FACE

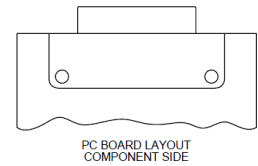
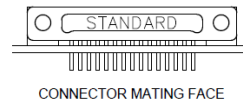
PC BOARD LAYOUT
 COMPONENT SIDE

FRONT FACE OF FLANGE

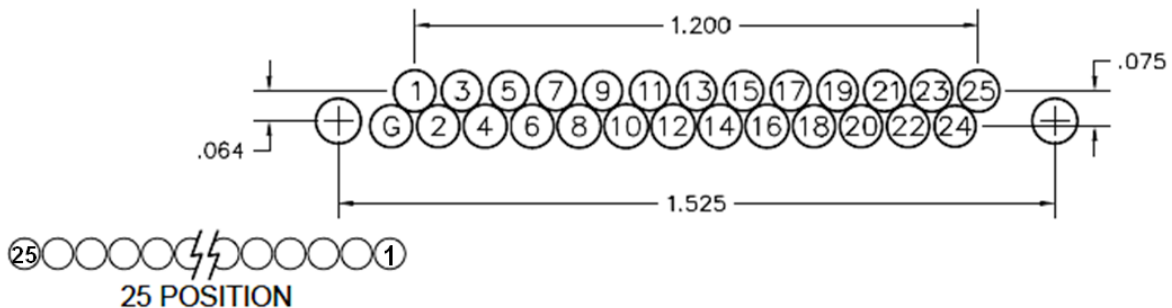
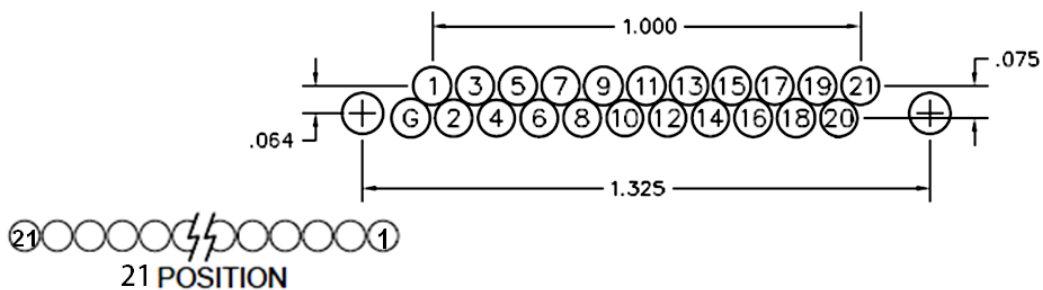
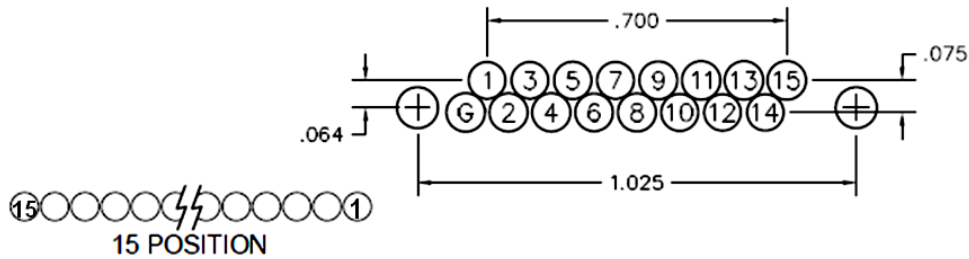
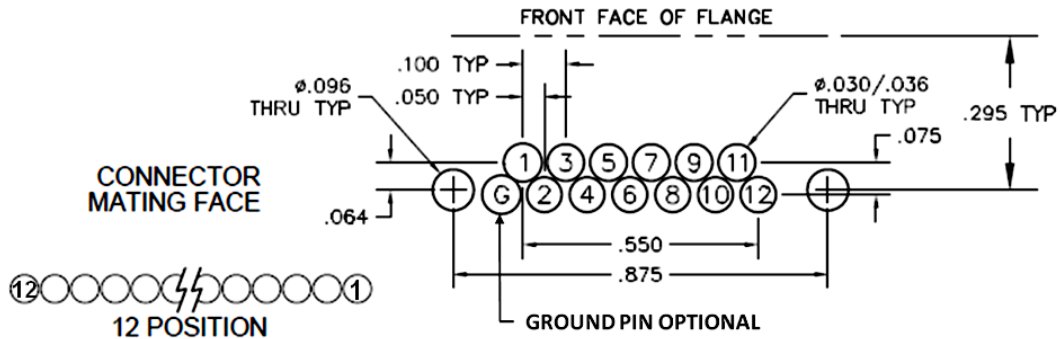


Recommended PC Board Layouts – MKHT Female

Right Angle
 Single Row
 Standard Polarization
 Sizes 12–25



**PC BOARD LAYOUT
 COMPONENT SIDE**





M

MICRO
0.050"
(1.27 mm)

MMHT – I/O Cable (Male)

MMHT interconnects are used in high-temperature applications. These rugged cable connectors come with a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS

| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | C | D |
| 9 | 2 | .755 | .334 | .390 | .565 |
| 15 | | .925 | .484 | .540 | .715 |
| 21 | | 1.075 | .634 | .690 | .865 |
| 25 | | 1.175 | .734 | .790 | .965 |
| 31 | | 1.325 | .884 | .940 | 1.115 |
| 37 | | 1.475 | 1.034 | 1.090 | 1.265 |
| 51 | 3 | 1.425 | .984 | 1.040 | 1.215 |
| 100 | 4 | 2.160 | 1.384 | 1.432 | 1.800 |

Please reference MMHTM-DIM-2 for more detail.

ORDER FORM

Sample Part Number Format: MMHT-212-025-161-41WA

| | | | | | | | | |
|---|--|-------------------------------|---|--|--|---|--|---|
| MMHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Rugged Metal I/O Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE 1 – Plug | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | PLATING 1 – 50 μ" Au contacts (crimp wire) 3 – 50 μ" Au contacts; Au terminations (solder cup, pigtail) | CONTACT/TERMINATION TYPE 11 – Pin, straight, 26 awg solder cup 1A – Pin, straight, 24 awg solder cup 1E – Pin, straight, 0.125" lead length†† 13 – Pin, straight, 0.250" lead length†† 14 – Pin, straight, 0.500" lead length†† 16 – Pin, straight, crimped wire | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)*** 41 – Two turning jackscrews, allen head, retaining ring (81)*** 42 – Two long turning jackscrews, allen head, retaining ring (82)*** 43 – Two turning jackscrews, slot head, retaining ring (83)*** 44 – Two long turning jackscrews, slot head, retaining ring (84)*** 45 – Two turning jackscrews, allen head, captivated** (85)*** FF – Float-mount: front panel mounting FR – Float-mount: rear panel mounting | WIRING 00 – None XX – See Wiring Codes |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable
- *** Numbers in parentheses are to be used when ordering size 100
- † Leads are soft copper, suitable for forming.

MMHT-212-025-161-41WA

High-Reliability Contact

MIL-DTL-83513

MATERIALS and FINISHES

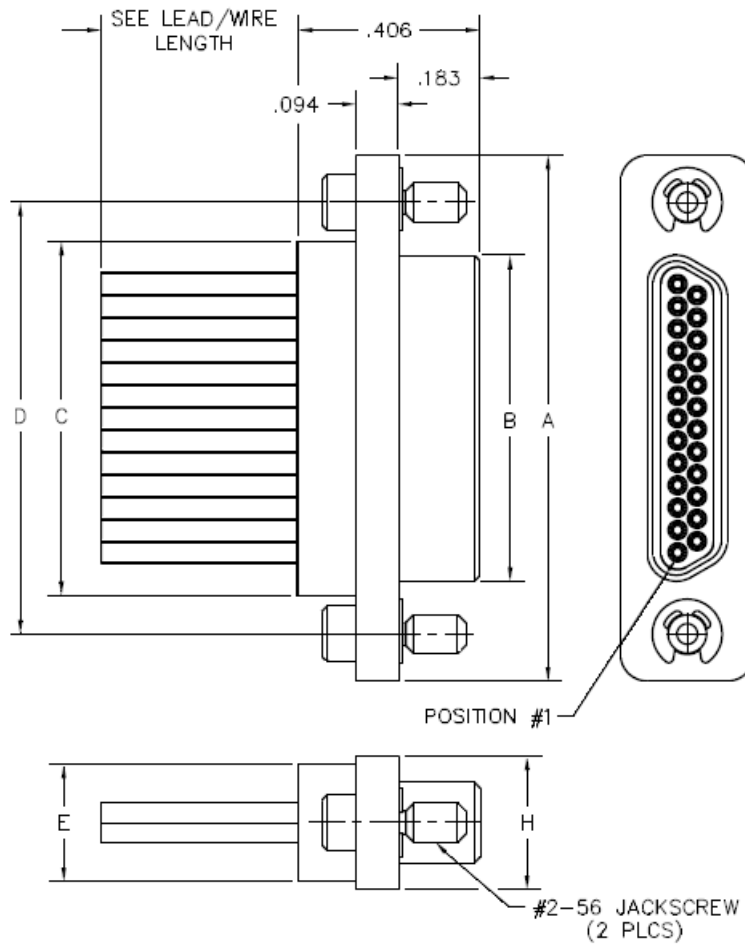
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 – insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MMHT MALE DRAWINGS



Straight
 Multi-Row
 Cable-to-Cable

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|---------|------|-------------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | E (MAX) | H | HARDWARE |
| 9 | 2 | .755 | .334 | .390 | .565 | .270 | .298 | #2-56 UNC THD (Ø.092 THRU) |
| 15 | | .925 | .484 | .540 | .715 | | | |
| 21 | | 1.075 | .634 | .690 | .865 | | | |
| 25 | | 1.175 | .734 | .790 | .965 | | | |
| 31 | | 1.325 | .884 | .940 | 1.115 | | | |
| 37 | | 1.475 | 1.034 | 1.090 | 1.265 | | | |
| 51 | 3 | 1.425 | .984 | 1.040 | 1.215 | .310 | .341 | #4-40 UNC THD (Ø.147 THRU) |
| 100 | 4 | 2.160 | 1.384 | 1.432 | 1.800 | .360 | .384 | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

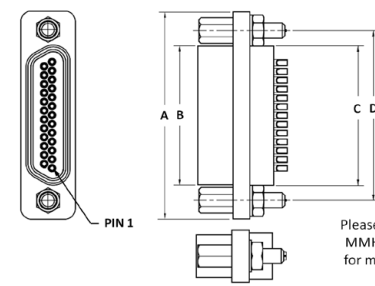


M **MICRO**
SERIES 0.050"
 (1.27 mm) 

MMHT – I/O Cable (Female)

MMHT interconnects are used in high-temperature applications. These rugged cable connectors come with a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



Please reference MMHTF-DIM-2 for more detail.

| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | C | D |
| 9 | 2 | .755 | .400 | .390 | .565 |
| 15 | | .925 | .550 | .540 | .715 |
| 21 | | 1.075 | .700 | .690 | .865 |
| 25 | | 1.175 | .800 | .790 | .965 |
| 31 | | 1.325 | .950 | .940 | 1.115 |
| 37 | 3 | 1.475 | 1.100 | 1.090 | 1.265 |
| 51 | 3 | 1.425 | 1.050 | 1.040 | 1.215 |
| 100 | 4 | 2.160 | 1.508 | 1.432 | 1.800 |

ORDER FORM

Sample Part Number Format: MMHT-222-025-2A3-2200

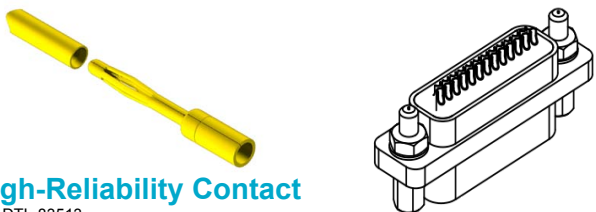
| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|---|--|-------------------------------------|---|--|--|---|--|---|
| MMHT | | | | | | | | |
| SERIES 0.050" Rugged Metal I/O Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE 2 – Receptacle | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | PLATING 1 – 50 μ" Au contacts (crimp wire) 3 – 50 μ" Au contacts; Au terminations (solder cup, pigtail) | CONTACT/TERMINATION TYPE 21 – Socket, straight, 26 awg solder cup 2A – Socket, straight, 24 awg solder cup 2E – Socket, straight, 0.125" lead length* 23 – Socket, straight, 0.250" lead length* 24 – Socket, straight, 0.500" lead length*† 26 – Socket, straight, crimped wire | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)*** 41 – Two turning jackscrews, allen head, retaining ring (81)*** 42 – Two long turning jackscrews, allen head, retaining ring (82)*** 43 – Two turning jackscrews, slot head, retaining ring (83)*** 44 – Two long turning jackscrews, slot head, retaining ring (84)*** 45 – Two turning jackscrews, allen head, captivated** (85)*** FF – Float-mount: front panel mounting FR – Float-mount: rear panel mounting | WIRING 00 – None XX – See Wiring Codes |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable
- *** Numbers in parentheses are to be used when ordering size 100
- † Leads are soft copper, suitable for forming.

MMHT-222-025-2A3-2200



High-Reliability Contact
 MIL-DTL-83513

MATERIALS and FINISHES

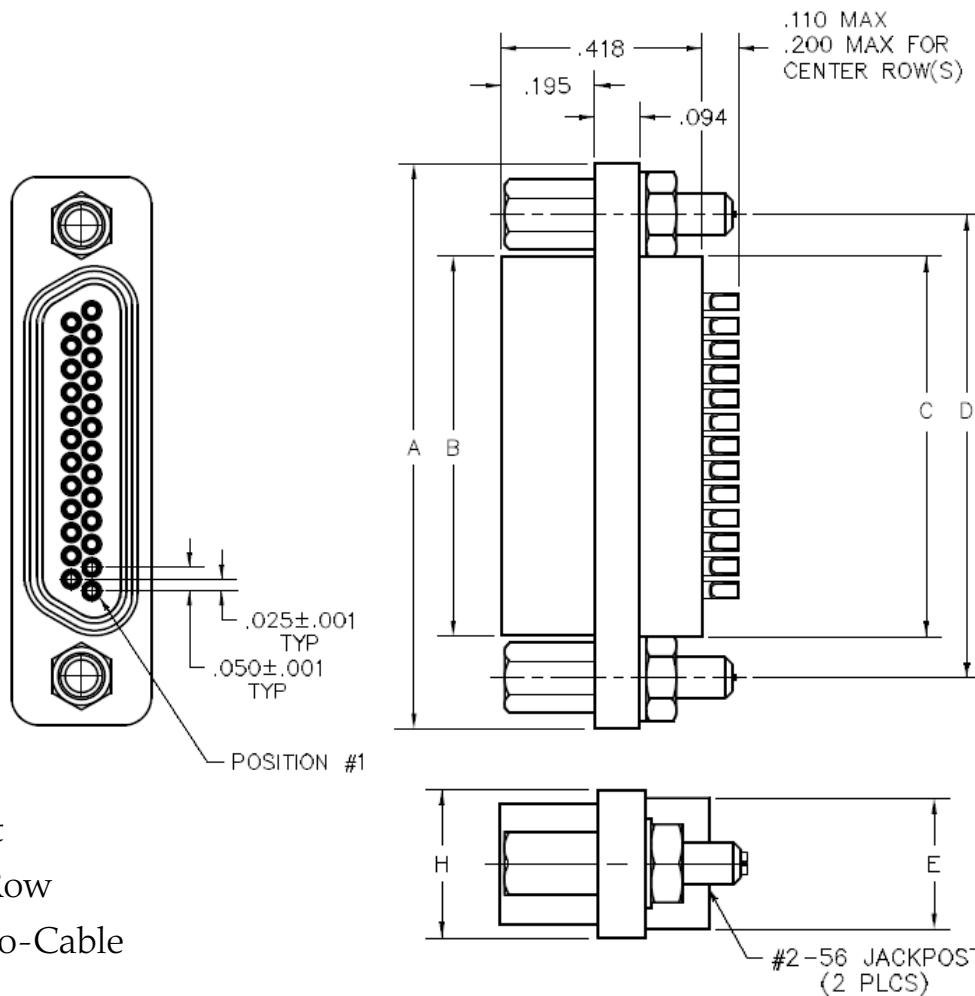
- Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
- Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
- Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
- Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
- Molded Insulators: High-temp thermoplastic
- Embedment: High-temp epoxy
- Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
- Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
- Tolerances: Angles: ±5°
Decimals: ±0.010"; Fractions: ±1/64"
Wire lengths – insulated/stranded: +1.0"/-0.0"
uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

- Contact Rating: 3 amperes maximum
- Operating Temperature: -55° C to 205° C
- Test Voltage: 600V, RMS, 60Hz
- Insulation Resistance: 5,000 megohms minimum @ 500 VDC
- Durability: 500 connector mating cycles
- Contact Engaging Force: 6.0 ounces maximum/contact
- Contact Separating Force: 0.5 ounces minimum/contact
- Mating and Unmating Force: 10 ounces maximum/contact

MMHT FEMALE DRAWINGS



Straight
 Multi-Row
 Cable-to-Cable

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|---------|------|-------------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | E (MAX) | H | HARDWARE |
| 9 | 2 | .755 | .400 | .390 | .565 | .270 | .298 | #2-56 UNC THD (Ø.092 THRU) |
| 15 | | .925 | .550 | .540 | .715 | | | |
| 21 | | 1.075 | .700 | .690 | .865 | | | |
| 25 | | 1.175 | .800 | .790 | .965 | | | |
| 31 | | 1.325 | .950 | .940 | 1.115 | | | |
| 37 | | 1.475 | 1.100 | 1.090 | 1.265 | | | |
| 51 | 3 | 1.425 | 1.050 | 1.040 | 1.215 | .310 | .341 | #4-40 UNC THD (Ø.147 THRU) |
| 100 | 4 | 2.160 | 1.508 | 1.432 | 1.800 | .360 | .384 | |

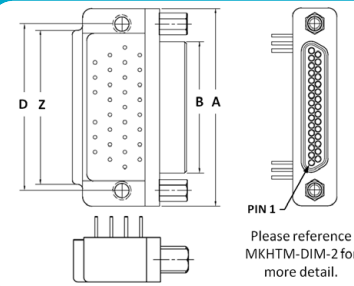
PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



MKHT – Right Angle Board-Mount (Male)

MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | |
|------------|------|-------|---------|-------|-------|------------------------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE |
| 9 | 2 | .755 | .334 | .565 | .775 | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .484 | .715 | .925 | |
| 21 | | 1.075 | .634 | .865 | 1.075 | |
| 25 | | 1.175 | .734 | .965 | 1.175 | |
| 31 | | 1.325 | .884 | 1.115 | 1.080 | |
| 37 | 3 | 1.475 | 1.034 | 1.265 | 1.180 | #4-40 UNC THREADED INSERT |
| 51 | | 1.425 | 0.984 | 1.215 | 1.220 | |
| 69 | | 1.725 | 1.284 | 1.515 | 1.450 | |
| 100 | 4 | 2.160 | 1.384 | 1.800 | 1.810 | |

PIN 1
 Please reference MKHTM-DIM-2 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-252-031-323-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|--|--|---|--|--|---|--|
| MKHT | | | | | | | |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE 5 – Plug, right angle, narrow footprint with threaded inserts | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 32 – Pin, right angle, 0.109" x 0.020" dia 33 – Pin, right angle, 0.140" x 0.020" dia 34 – Pin, right angle, 0.172" x 0.020" dia | WIRING 0S – Standard body polarization |
| | | | | | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)* | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

* Number in parentheses to be used when ordering size 100

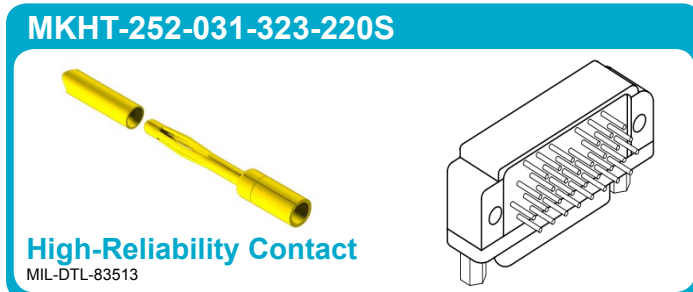
MATERIALS and FINISHES

Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

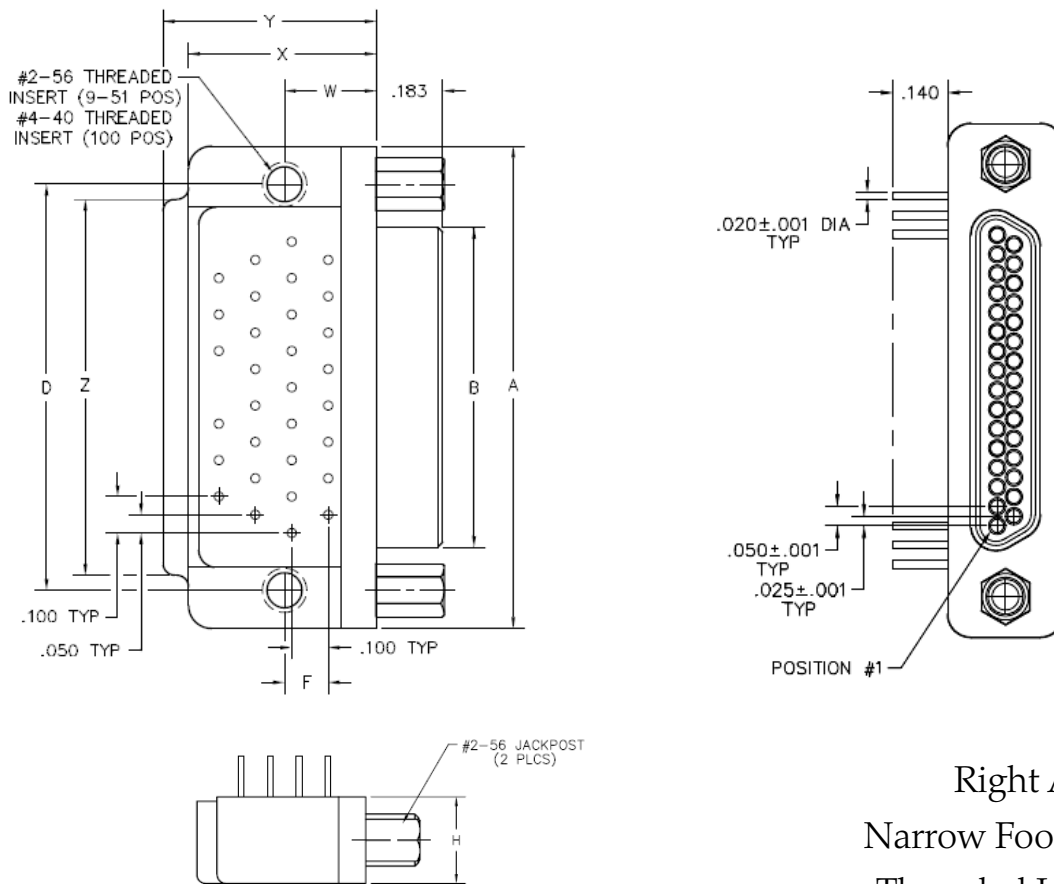
NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact



MKHT MALE DRAWINGS



Right Angle
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | |
|------------|------|-------|---------|-------|------|------|------|---------|---------|-------|---------------|
| SIZE | ROWS | A | B (MAX) | D | F | H | W | X (MAX) | Y (MAX) | Z | HARDWARE |
| 9 | 2 | .755 | .334 | .565 | .120 | .298 | .250 | .420 | .420 | .775 | #2-56 UNC THD |
| 15 | | .925 | .484 | .715 | | | | | | .925 | |
| 21 | | 1.075 | .634 | .865 | | | | | | 1.075 | |
| 25 | | 1.175 | .734 | .965 | | | | | | 1.175 | |
| 31 | | 1.325 | .884 | 1.115 | | | | | | 1.080 | |
| 37 | | 1.475 | 1.034 | 1.265 | | | | | | 1.180 | |
| 51 | 3 | 1.425 | .984 | 1.215 | .150 | .341 | .300 | .430 | .650 | 1.220 | #2-56 UNC THD |
| 69 | | 1.725 | 1.284 | 1.515 | | | | | .755 | 1.450 | |
| 100 | 4 | 2.160 | 1.384 | 1.800 | .200 | .384 | .400 | .590 | 1.000 | 1.810 | #4-40 UNC THD |

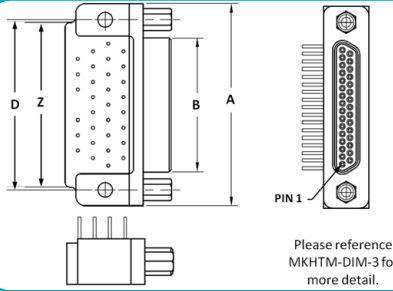
PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



MKHT – Right Angle Board-Mount with Blind Clearance Cut (Male)

MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | | |
|------------|------|-------|---------|-------|-------|---------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .755 | .334 | .565 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .484 | .715 | .925 | | |
| 21 | | 1.075 | .634 | .865 | 1.075 | | |
| 25 | | 1.175 | .734 | .965 | 1.175 | | |
| 31 | | 1.325 | .884 | 1.115 | 1.080 | | |
| 37 | 3 | 1.475 | 1.034 | 1.265 | 1.180 | #4-40 UNC THD | #4-40 UNC INSERT |
| 51 | | 1.425 | .984 | 1.215 | 1.220 | | |
| 69 | | 1.725 | 1.284 | 1.515 | 1.450 | | |
| 100 | 4 | 2.160 | 1.384 | 1.800 | 1.810 | #4-40 UNC THD | #4-40 UNC INSERT |

ORDER FORM

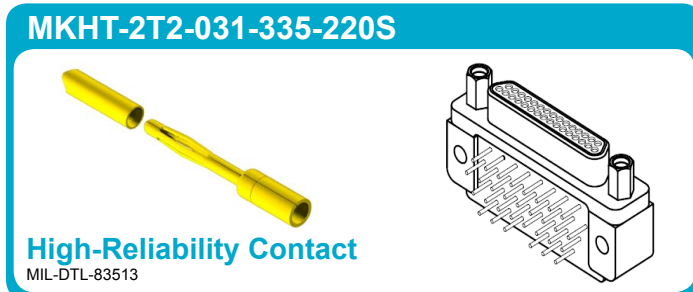
Sample Part Number Format: **MKHT-2T2-031-335-220S**

| | | | | | | | | |
|--|--|--|---|--|--|--|--|---|
| MKHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE T – Plug, right angle (blind clearance cut), narrow footprint with threaded inserts | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 32 – Pin, right angle, 0.109" 33 – Pin, right angle, 0.140" 34 – Pin, right angle, 0.172" | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)* | WIRING 0R – Reversed body polarization 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

* Number in parentheses to be used when ordering size 100



MATERIALS and FINISHES

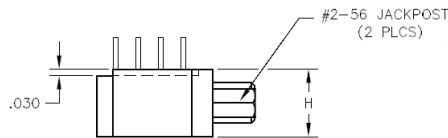
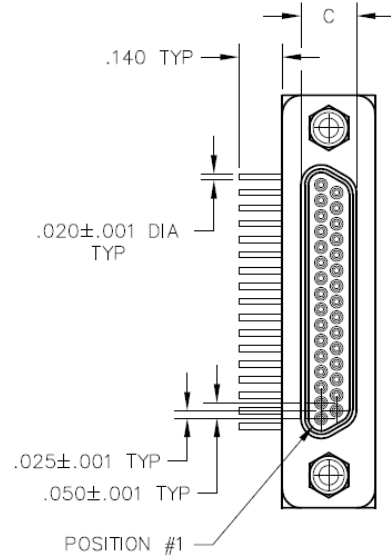
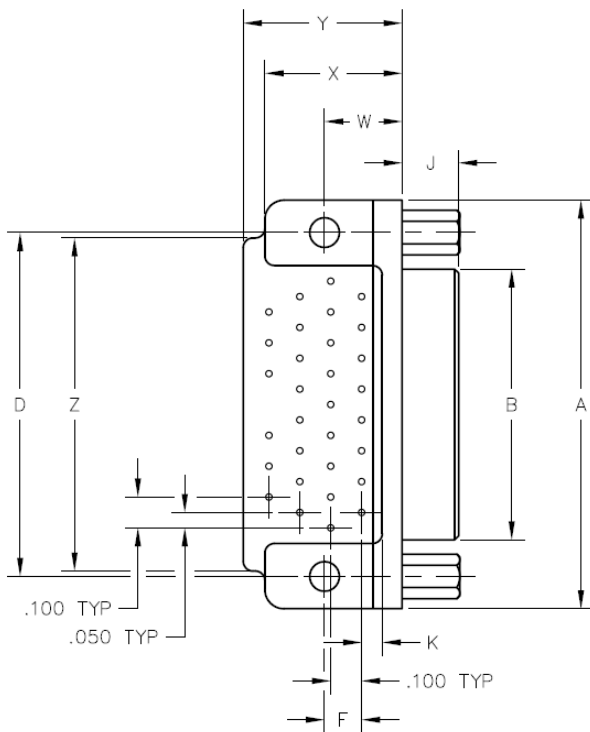
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MKHT (BLIND CLEARANCE CUT) MALE DRAWINGS



Right Angle
 Blind Clearance Cut
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|------|------|------|------|------|---------|---------|---------------|------------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .755 | .334 | .185 | .565 | .120 | .298 | .183 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .484 | | .715 | | | | | | | | .925 | | |
| 21 | | 1.075 | .634 | | .865 | | | | | | | | 1.075 | | |
| 25 | | 1.175 | .734 | | .965 | | | | | | | | 1.175 | | |
| 31 | | 1.325 | .884 | | 1.115 | | | | | | | | 1.080 | | |
| 37 | | 1.475 | 1.034 | | 1.265 | | | | | | | | 1.180 | | |
| 51 | 3 | 1.425 | .984 | .228 | 1.215 | .150 | .341 | .087 | .300 | .430 | .650 | 1.220 | #4-40 UNC THD | #4-40 UNC INSERT | |
| 69 | | 1.725 | 1.284 | | 1.515 | | | | | | | 1.450 | | | |
| 100 | 4 | 2.160 | 1.384 | .271 | 1.800 | .200 | .384 | | .137 | .400 | .590 | 1.000 | 1.810 | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



MKHT – Right Angle Board-Mount with Thru Clearance Cut (Male)
 MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS

| DIMENSIONS | | | | | | |
|------------|-------|-------|---------|-------|-------|------------------------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE |
| 9 | 2 | .755 | .334 | .565 | .775 | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .484 | .715 | .925 | |
| 21 | | 1.075 | .634 | .865 | 1.075 | |
| 25 | | 1.175 | .734 | .965 | 1.175 | |
| 31 | | 1.325 | .884 | 1.115 | 1.080 | |
| 37 | 1.475 | 1.034 | 1.265 | 1.180 | | |
| 51 | 3 | 1.425 | 0.984 | 1.215 | 1.220 | |
| 69 | | 1.725 | 1.284 | 1.515 | 1.450 | |

Please reference MKHTM-DIM-4 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-2R2-031-335-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|--|--|---|--|--|---|--|
| MKHT | | | | | | | |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) | BODY STYLE R – Plug, right angle (thru clearance cut), narrow footprint with threaded insert | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 32 – Pin, right angle, 0.109" 33 – Pin, right angle, 0.140" 34 – Pin, right angle, 0.172" x 0.020" dia | WIRING 0S – Standard body polarization |
| | | | | | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MKHT-2R2-031-335-220S

High-Reliability Contact
 MIL-DTL-83513

MATERIALS and FINISHES

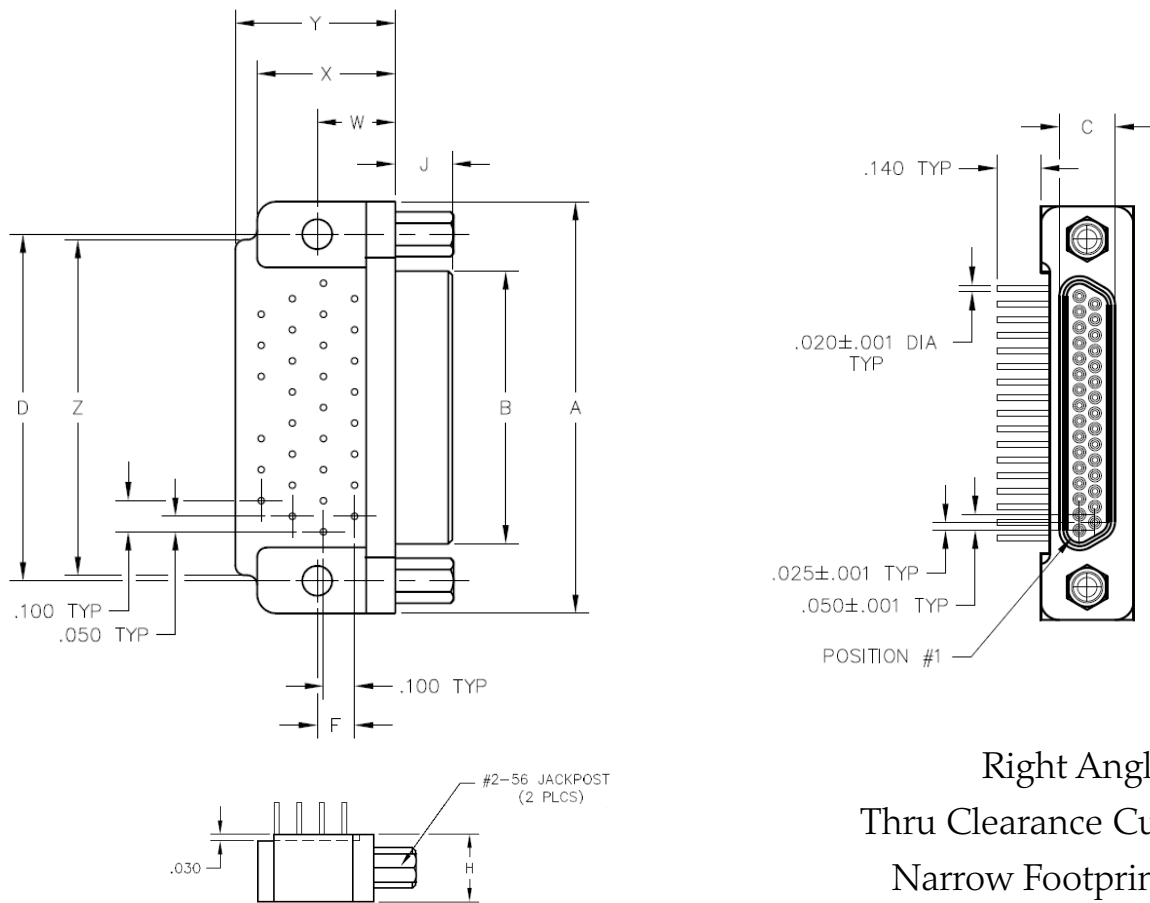
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MKHT (THRU CLEARANCE CUT) MALE DRAWINGS



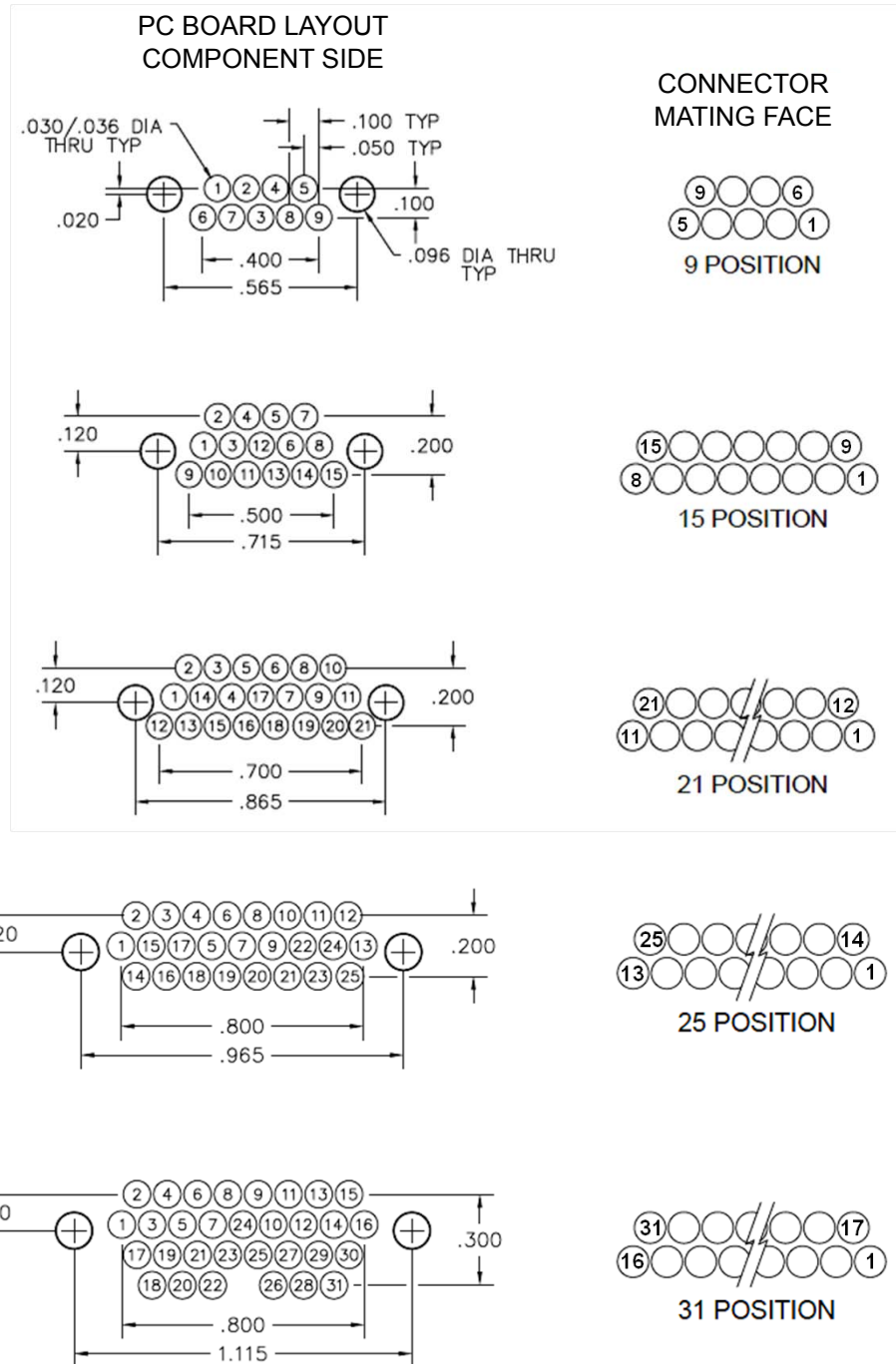
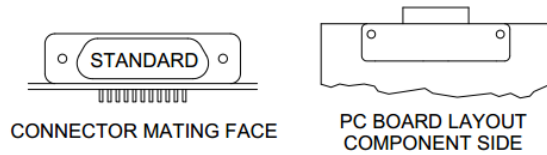
Right Angle
 Thru Clearance Cut
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|-------|------|------|------|------|---------|---------|---------------|---------------------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .755 | .334 | .185 | .565 | .020 | .298 | .183 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .484 | | .715 | .925 | | | | | | | | | |
| 21 | | 1.075 | .634 | | .865 | 1.075 | | | | | | | | | |
| 25 | | 1.175 | .734 | | .965 | 1.175 | | | | | | | | | |
| 31 | | 1.325 | .884 | | 1.115 | 1.080 | | | | | | | | | |
| 37 | | 1.475 | 1.034 | | 1.265 | 1.180 | | | | | | | | | |
| 51 | 3 | 1.425 | .984 | .228 | 1.215 | .150 | .341 | .087 | .300 | .430 | .650 | 1.220 | #2-56 UNC THD | #2-56 UNC THREADED INSERT | |
| 69 | | 1.725 | 1.284 | | 1.515 | | | | | | | 1.450 | | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

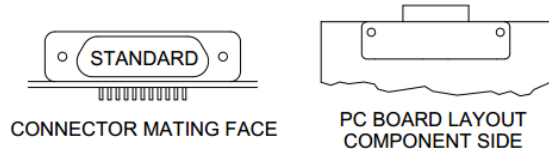
Recommended PC Board Layouts – MKHT Male

Right Angle
 Narrow Footprint
 Standard Polarization
 Sizes 9–31

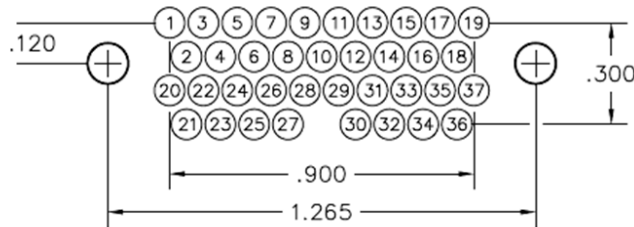


Recommended PC Board Layouts – MKHT Male

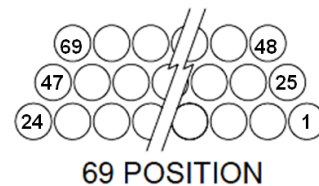
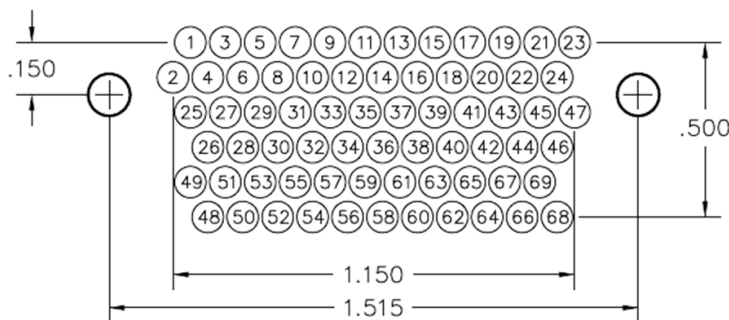
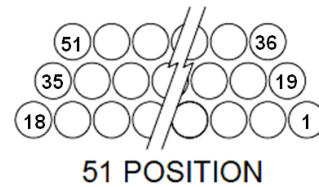
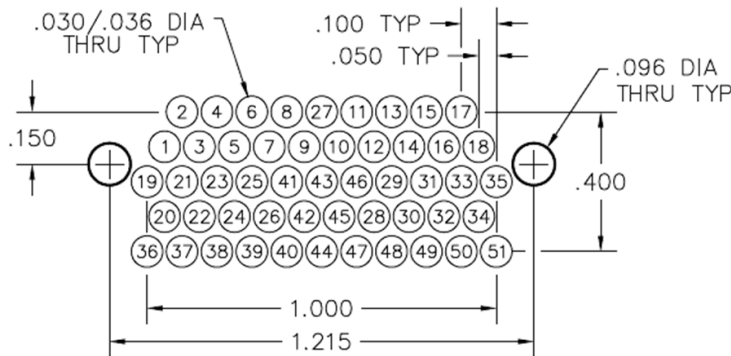
Right Angle
 Narrow Footprint
 Standard Polarization
 Sizes 37–69



PC BOARD LAYOUT COMPONENT SIDE



CONNECTOR MATING FACE



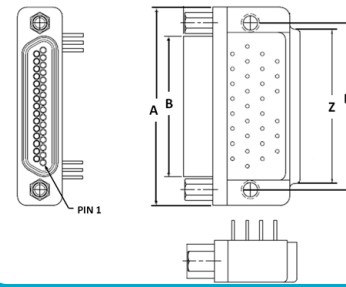


M **MICRO**
 0.050"
 (1.27 mm)

MKHT – Right Angle Board-Mount (Female)

MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | |
|------------|------|-------|---------|-------|-------|-------------------------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE |
| 9 | 2 | .755 | .400 | .565 | .775 | #2-56 UNC THD (Ø.092 THRU) |
| 15 | | .925 | .550 | .715 | .925 | |
| 21 | | 1.075 | .700 | .865 | 1.075 | |
| 25 | | 1.175 | .800 | .965 | 1.175 | |
| 31 | | 1.325 | .950 | 1.115 | 1.080 | |
| 37 | | 1.475 | 1.100 | 1.265 | 1.180 | |

Please reference MKHTF-DIM-2 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-262-031-443-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|--|--|---|--|--|--|--|--|
| MKHT | | | | | | | | |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE 6 – Receptacle, right angle, narrow footprint with threaded inserts and interfacial seal. | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia 44 – Socket, right angle, 0.140" x 0.020" dia 45 – Socket, right angle, 0.172" x 0.020" dia | PLATING 3 – 50 µ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)* | POLARIZATION 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

* Number in parentheses to be used when ordering size 100

MATERIALS and FINISHES

Socket Contact: Brass per ASTM B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 µ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

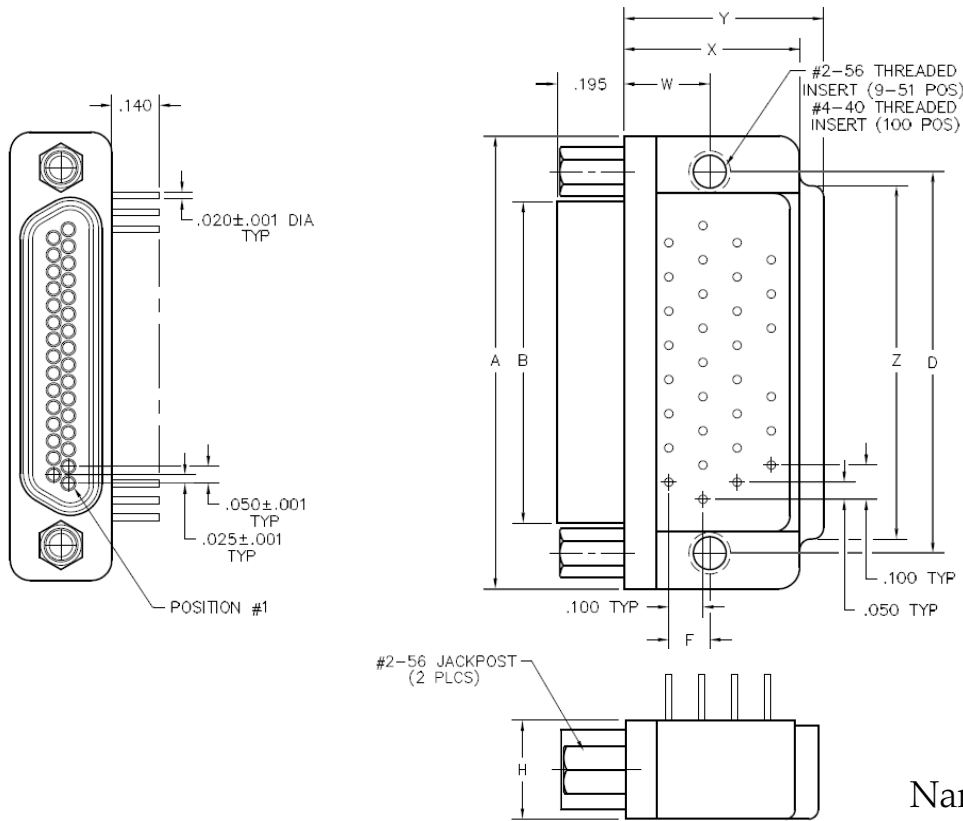
PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MKHT-262-031-443-220S

High-Reliability Contact
 MIL-DTL-83513

MKHT FEMALE DRAWINGS



Right Angle
 Narrow Footprint
 Threaded Inserts
 Interfacial Seal

| DIMENSIONS | | | | | | | | | | | |
|------------|------|-------|---------|-------|------|------|------|---------|---------|-------|---------------|
| SIZE | ROWS | A | B (MAX) | D | F | H | W | X (MAX) | Y (MAX) | Z | HARDWARE |
| 9 | 2 | .755 | .400 | .565 | .020 | .298 | .250 | .420 | .420 | .775 | #2-56 UNC THD |
| 15 | | .925 | .550 | .715 | .120 | | | | | .925 | |
| 21 | | 1.075 | .700 | .865 | | | | | | 1.075 | |
| 25 | | 1.175 | .800 | .965 | | | | | | 1.175 | |
| 31 | | 1.325 | .950 | 1.115 | | | | | | 1.080 | |
| 37 | | 1.475 | 1.100 | 1.265 | | | | | | 1.180 | |
| 51 | 3 | 1.425 | 1.050 | 1.215 | | .150 | .341 | .300 | .430 | .650 | 1.220 |
| 69 | | 1.725 | 1.350 | 1.515 | .755 | | | | | 1.450 | |
| 100 | 4 | 2.160 | 1.508 | 1.800 | .200 | .384 | .400 | .590 | 1.000 | 1.810 | #4-40 UNC THD |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

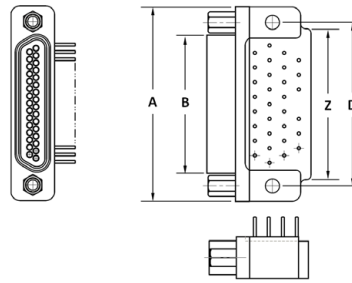
M **MICRO**
SERIES 0.050"
 (1.27 mm)



MKHT – Right Angle Board-Mount with Blind Clearance Cut (Female)

MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | D | Z |
| 9 | 2 | .755 | .334 | .565 | .775 |
| 15 | | .925 | .484 | .715 | .925 |
| 21 | | 1.075 | .634 | .865 | 1.075 |
| 25 | | 1.175 | .734 | .965 | 1.175 |
| 31 | | 1.325 | .884 | 1.115 | 1.080 |
| 37 | 3 | 1.475 | 1.034 | 1.265 | 1.180 |
| 51 | | 1.425 | 0.984 | 1.215 | 1.220 |
| 69 | | 1.725 | 1.284 | 1.515 | 1.450 |
| 100 | 4 | 2.160 | 1.384 | 1.800 | 1.810 |

Please reference MKHT-DIM-3 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-2V2-031-445-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|--|---|---|--|--|--|--|---|
| MKHT | | | | | | | | |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) 4 – 4-Row (100 contacts) | BODY STYLE V – Receptacle, right angle (blind clearance cut), narrow footprint with threaded inserts and interfacial seal | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts 100 – 100 Contacts | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia 44 – Socket, right angle, 0.140" x 0.020" dia 45 – Socket, right angle, 0.172" x 0.020" dia | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies (62)* | WIRING 0R – Reversed body polarization 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

* Number in parentheses to be used when ordering size 100

MATERIALS and FINISHES

Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

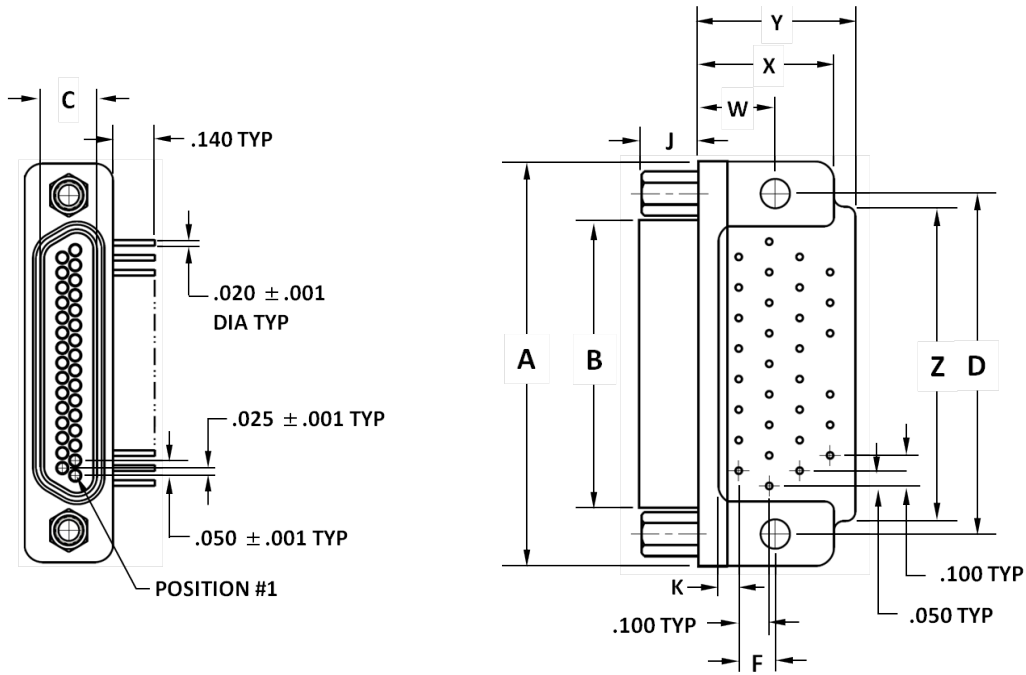
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MKHT-2V2-031-445-220S

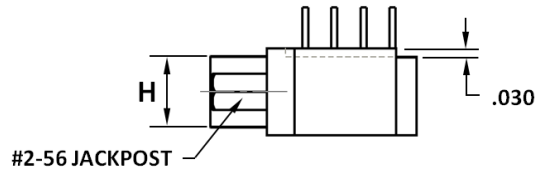



High-Reliability Contact
 MIL-DTL-83513

MKHT (BLIND CLEARANCE CUT) FEMALE DRAWINGS



Right Angle
 Blind Clearance Cut
 Narrow Footprint
 Threaded Inserts



| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|-------|------|------|------|------|---------|---------|---------------|---------------------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .755 | .400 | .251 | .565 | .020 | .298 | .195 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .550 | | .715 | .925 | | | | | | | | | |
| 21 | | 1.075 | .700 | | .865 | 1.075 | | | | | | | | | |
| 25 | | 1.175 | .800 | | .965 | 1.175 | | | | | | | | | |
| 31 | | 1.325 | .950 | | 1.115 | 1.080 | | | | | | | | | |
| 37 | | 1.475 | 1.100 | | 1.265 | 1.180 | | | | | | | | | |
| 51 | 3 | 1.425 | 1.050 | .294 | 1.215 | .150 | .341 | .087 | .300 | .430 | .650 | 1.220 | #2-56 UNC THD | #2-56 UNC THREADED INSERT | |
| 69 | | 1.725 | 1.350 | | 1.515 | | | | | | | .755 | | | 1.450 |
| 100 | 4 | 2.160 | 1.508 | .394 | 1.800 | .200 | .384 | .137 | .400 | .590 | 1.000 | 1.810 | #4-40 UNC THD | #4-40 UNC INSERT | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

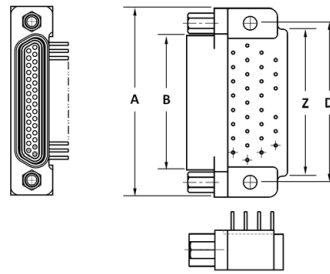
M **MICRO**
0.050"
(1.27 mm)



MKHT – Right Angle Board-Mount with Thru Clearance Cut (Female)

MKHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | D | Z |
| 9 | 2 | .755 | .334 | .565 | .775 |
| 15 | | .925 | .484 | .715 | .925 |
| 21 | | 1.075 | .634 | .865 | 1.075 |
| 25 | | 1.175 | .734 | .965 | 1.175 |
| 31 | | 1.325 | .884 | 1.115 | 1.080 |
| 37 | 3 | 1.475 | 1.034 | 1.265 | 1.180 |
| 51 | | 1.425 | 0.984 | 1.215 | 1.220 |
| 69 | | 1.725 | 1.284 | 1.515 | 1.450 |

Please reference MKHT-DIM-4 for more detail.

ORDER FORM

Sample Part Number Format: **MKHT-2S2-031-445-220S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|--|--|---|--|--|--|--|--|
| MKHT | | | | | | | | |
| SERIES 0.050" Rugged Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 & 69 contacts) | BODY STYLE S – Receptacle, right angle (thru clearance cut), narrow footprint with threaded inserts and interfacial seal | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts 069 – 69 Contacts | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia 44 – Socket, right angle, 0.140" x 0.020" dia 45 – Socket, right angle, 0.172" x 0.020" dia | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | WIRING 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MATERIALS and FINISHES

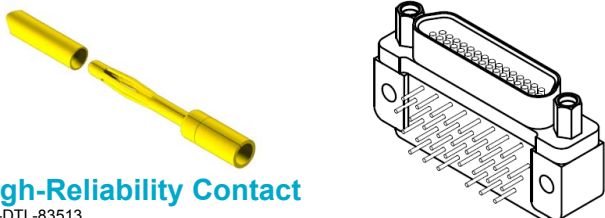
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" un-insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

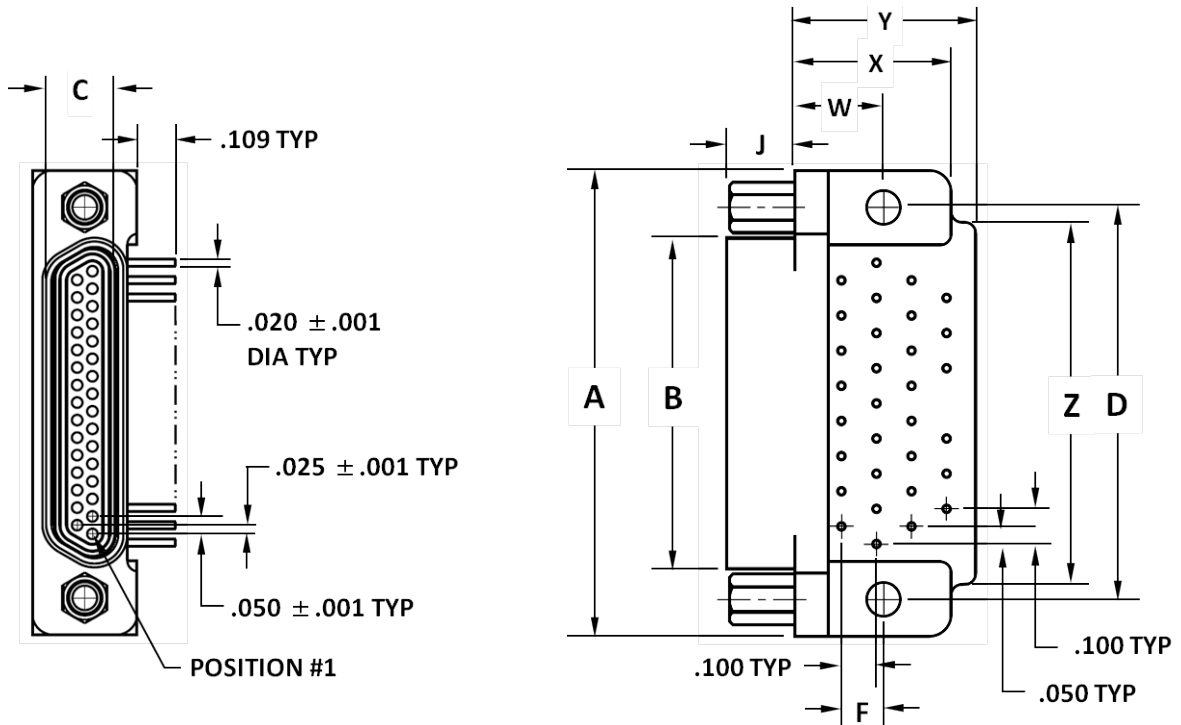
MKHT-2S2-031-445-220S



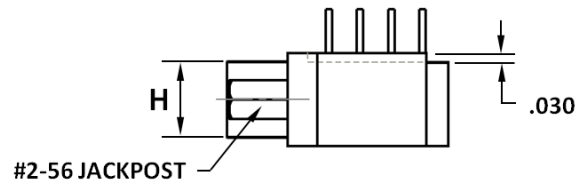
High-Reliability Contact

MIL-DTL-83513

MKHT (THRU CLEARANCE CUT) FEMALE DRAWINGS



Right Angle
 Thru Clearance Cut
 Narrow Footprint
 Threaded Inserts

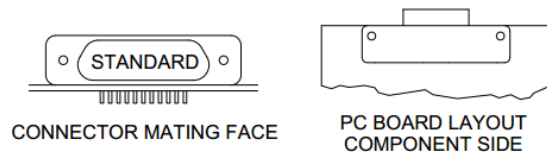


| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|-------|------|------|------|------|---------|---------|---------------|---------------------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .755 | .400 | .251 | .565 | .020 | .298 | .195 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .925 | .550 | | .715 | .925 | | | | | | | | | |
| 21 | | 1.075 | .700 | | .865 | 1.075 | | | | | | | | | |
| 25 | | 1.175 | .800 | | .965 | 1.175 | | | | | | | | | |
| 31 | | 1.325 | .950 | | 1.115 | 1.080 | | | | | | | | | |
| 37 | | 1.475 | 1.100 | | 1.265 | 1.180 | | | | | | | | | |
| 51 | 3 | 1.425 | 1.050 | .294 | 1.215 | .150 | .341 | .087 | .300 | .430 | .650 | 1.220 | #2-56 UNC THD | #2-56 UNC THREADED INSERT | |
| 69 | | 1.725 | 1.350 | | 1.515 | | | | | | | .755 | | | 1.450 |

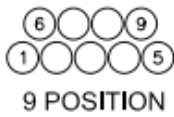
PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

Recommended PC Board Layouts – MKHT Female

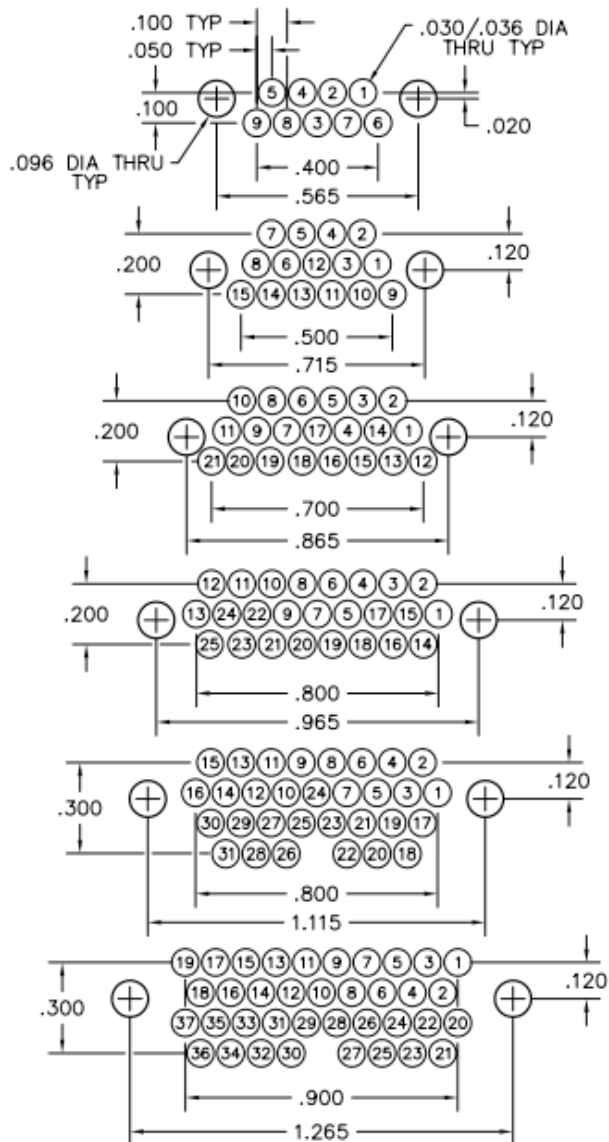
Right Angle
 Narrow Footprint
 Standard Polarization
 Sizes 9–37



CONNECTOR MATING FACE

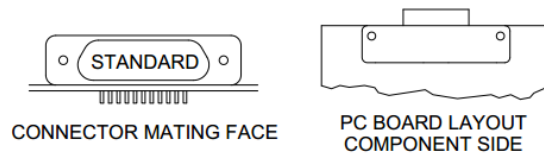


PC BOARD LAYOUT COMPONENT SIDE

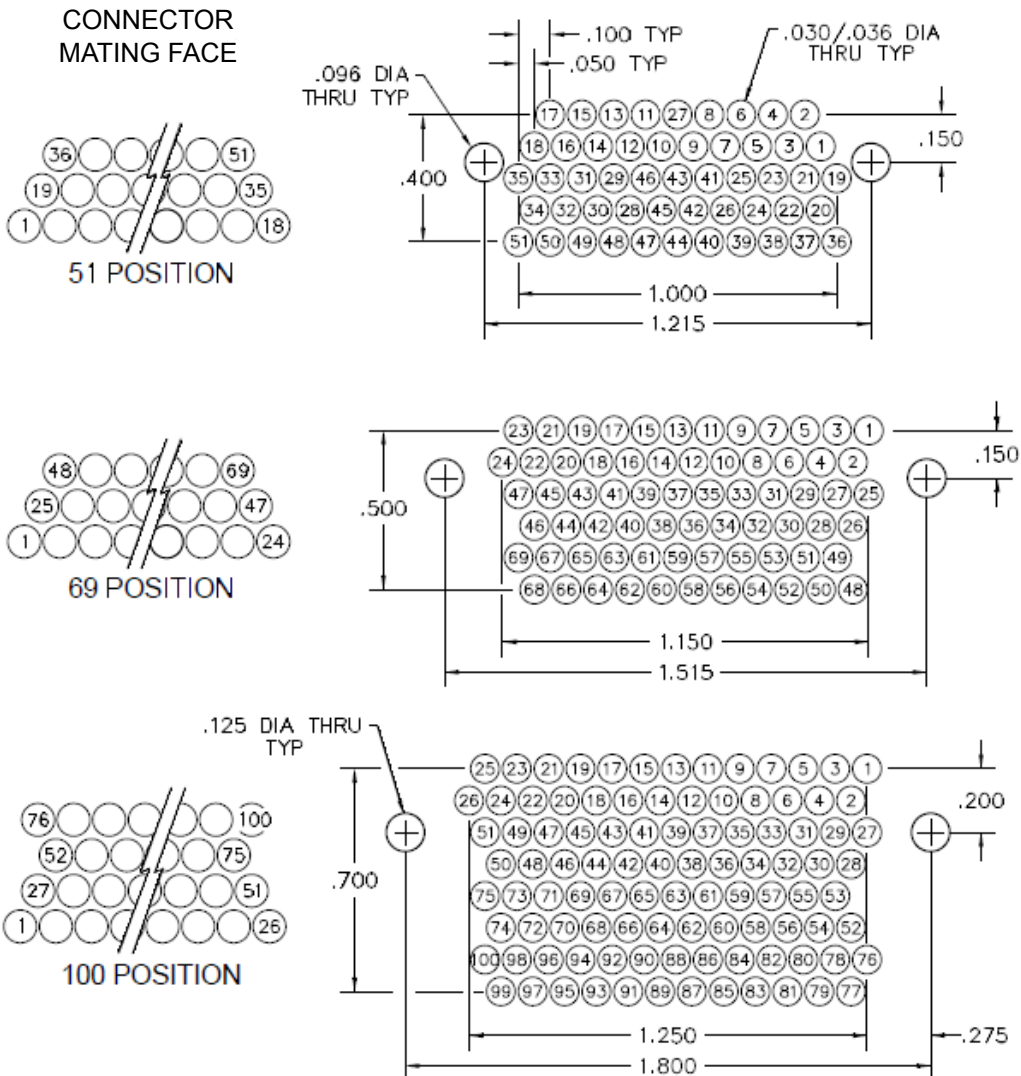


Recommended PC Board Layouts – MKHT Female

Right Angle
 Narrow Footprint
 Standard Polarization
 Sizes 51–100



PC BOARD LAYOUT COMPONENT SIDE



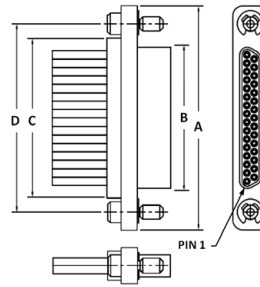


M **MICRO**
 0.050"
 (1.27 mm)

MQHT – Low-Profile I/O Cable (Male)

MQHT interconnects are used in high-temperature applications. These low-profile connectors come with a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | C | D |
| 9 | 2 | .778 | .292 | .398 | .565 |
| 15 | | .928 | .442 | .548 | .715 |
| 21 | | 1.078 | .592 | .698 | .865 |
| 25 | | 1.178 | .692 | .798 | .965 |
| 31 | | 1.328 | .842 | .948 | 1.115 |
| 37 | 3 | 1.478 | .992 | 1.098 | 1.265 |
| 51 | | 1.428 | .942 | 1.048 | 1.215 |

Please reference MQHTM-DIM-1 for more detail.

ORDER FORM

Sample Part Number Format: MQHT-212-031-161-41WS

| | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|
| MQHT | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|

SERIES
 0.050" Low-Profile
 Metal I/O Connector
 (Male)

ROWS
 2 – 2-Row
 (9-37 contacts)
 3 – 3-Row
 (51 contacts)

BODY STYLE
 1 – Plug

BODY MATERIAL
 2 – High-temp
 thermoplastic
 with electroless
 nickel shell
 4 – High-temp
 thermoplastic
 with hard black
 anodized shell
 5 – High-temp
 with stainless
 steel shell

SIZE
 009 – 9 Contacts
 015 – 15 Contacts
 021 – 21 Contacts
 025 – 25 Contacts
 031 – 31 Contacts
 037 – 37 Contacts
 051 – 51 Contacts

PLATING
 1 – 50 μ" Au contacts
 (crimp wire)
 3 – 50 μ" Au contacts;
 Au terminations
 (solder cup, pigtail)

WIRING
 00 – None
 XX – See Wiring
 Codes

CONTACT/TERMINATION TYPE
 11 – Pin, straight, 26 awg solder cup
 1A – Pin, straight, 24 awg solder cup
 1E – Pin, straight, 0.125" lead length††
 13 – Pin, straight, 0.250" lead length††
 14 – Pin, straight, 0.500" lead length††
 16 – Pin, straight, crimped wire

HARDWARE
 00 – No hardware
 22 – Two fixed jacknut assemblies
 41 – Two turning jackscrews, allen
 head, retaining ring
 42 – Two long turning jackscrews,
 allen head, retaining ring
 43 – Two turning jackscrews, slot
 head, retaining ring
 44 – Two long turning jackscrews, slot
 head, retaining ring
 45 – Two turning jackscrews, allen
 head, captivated**
 FF – Float-mount: front panel
 mounting
 FR – Float-mount: rear panel
 mounting

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable
- † Leads are soft copper, suitable for forming.

MATERIALS and FINISHES

Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11
 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black
 anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM
 A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M,
 passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

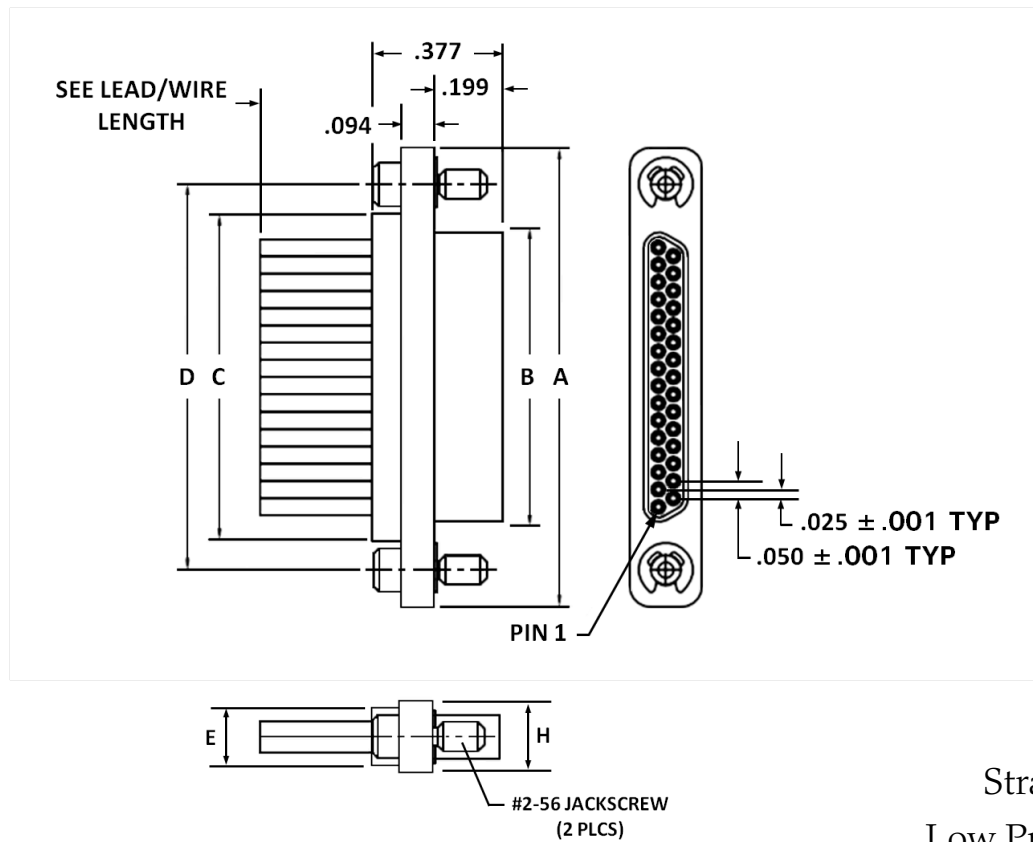
PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MQHT-212-031-161-41WS

High-Reliability Contact
 MIL-DTL-83513

MQHT MALE DRAWINGS



Straight
 Low Profile
 Cable-to-Cable

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|------|------|-------------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | E | H | HARDWARE |
| 9 | 2 | .778 | .292 | .398 | .565 | .173 | .208 | #2-56 UNC THD (Ø.092 THRU) |
| 15 | | .928 | .442 | .548 | .715 | | | |
| 21 | | 1.078 | .592 | .698 | .865 | | | |
| 25 | | 1.178 | .692 | .798 | .965 | | | |
| 31 | | 1.328 | .842 | .948 | 1.115 | | | |
| 37 | | 1.478 | .992 | 1.098 | 1.265 | | | |
| 51 | 3 | 1.428 | .942 | 1.048 | 1.215 | .220 | .250 | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

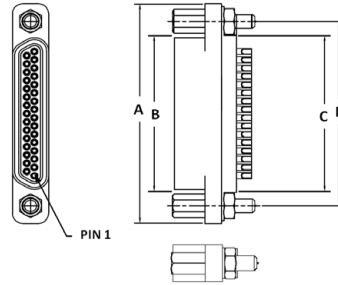


M **MICRO**
 0.050"
 (1.27 mm)

MQHT – Low-Profile I/O Cable (Female)

MQHT interconnects are used in high-temperature applications. These low-profile connectors come with a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | C | D |
| 9 | 2 | .778 | .378 | .398 | .565 |
| 15 | | .928 | .528 | .548 | .715 |
| 21 | | 1.078 | .678 | .698 | .865 |
| 25 | | 1.178 | .778 | .798 | .965 |
| 31 | | 1.328 | .928 | .948 | 1.115 |
| 37 | 3 | 1.478 | 1.078 | 1.098 | 1.265 |
| 51 | | 1.428 | 1.028 | 1.048 | 1.215 |

Please reference MQHTF-DIM-1 for more detail.

ORDER FORM

Sample Part Number Format: **MQHT-222-031-2A3-2200**

| | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|
| MQHT | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|

SERIES
 0.050" Low-Profile Metal I/O Connector (Female)

ENTER CODE
ROWS
 2 – 2-Row (9-37 contacts)
 3 – 3-Row (51 contacts)

ENTER CODE
BODY STYLE
 2 – Receptacle

ENTER CODE
BODY MATERIAL
 2 – High-temp thermoplastic with electroless nickel shell
 4 – High-temp thermoplastic with hard black anodized shell
 5 – High-temp with stainless steel shell

ENTER CODE
SIZE
 009 – 9 Contacts
 015 – 15 Contacts
 021 – 21 Contacts
 025 – 25 Contacts
 031 – 31 Contacts
 037 – 37 Contacts
 051 – 51 Contacts

ENTER CODE
ENTER CODE
PLATING
 1 – 50 μ" Au contacts (crimp wire)
 3 – 50 μ" Au contacts; Au terminations (solder cup, pigtail)

CONTACT/TERMINATION TYPE
 21 – Socket, straight, 26 awg solder cup
 2A – Socket, straight, 24 awg solder cup
 2E – Socket, straight, 0.125" lead length*
 23 – Socket, straight, 0.250" lead length*
 24 – Socket, straight, 0.500" lead length*†
 26 – Socket, straight, crimped wire

ENTER CODE
ENTER CODE
WIRING
 00 – None
 XX – See Wiring Codes

HARDWARE
 00 – No hardware
 22 – Two fixed jacknut assemblies
 41 – Two turning jackscrews, allen head, retaining ring
 42 – Two long turning jackscrews, allen head, retaining ring
 43 – Two turning jackscrews, slot head, retaining ring
 44 – Two long turning jackscrews, slot head, retaining ring
 45 – Two turning jackscrews, allen head, captivated**
 FF – Float-mount: front panel mounting
 FR – Float-mount: rear panel mounting

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

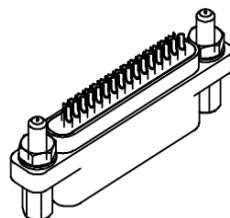
- * 0.018 diameter
- ** Captivated hardware is factory-installed and non-removable
- † Leads are soft copper, suitable for forming.

MQHT-222-031-2A3-2200



High-Reliability Contact

MIL-DTL-83513



MATERIALS and FINISHES

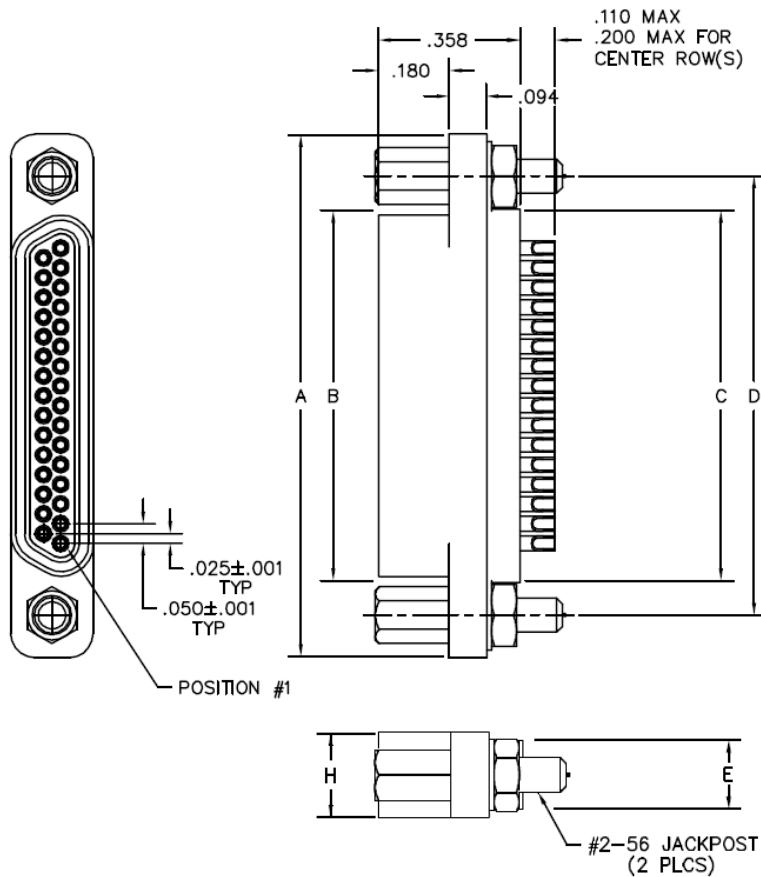
Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11
 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MQHT FEMALE DRAWINGS



Straight
 Low Profile
 Cable-to-Cable

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|------|------|-------------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | E | H | HARDWARE |
| 9 | 2 | .778 | .378 | .398 | .565 | .173 | .208 | #2-56 UNC THD (Ø.092 THRU) |
| 15 | | .928 | .528 | .548 | .715 | | | |
| 21 | | 1.078 | .678 | .698 | .865 | | | |
| 25 | | 1.178 | .778 | .798 | .965 | | | |
| 31 | | 1.328 | .928 | .948 | 1.115 | | | |
| 37 | | 1.478 | 1.078 | 1.098 | 1.265 | | | |
| 51 | 3 | 1.428 | 1.028 | 1.048 | 1.215 | .220 | .250 | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



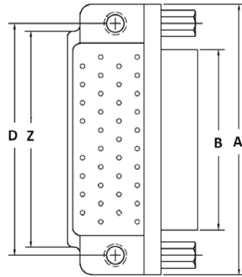
M **MICRO**
0.050"
(1.27 mm)



MSHT – Low-Profile, Right Angle Board-Mount (Male)

MSHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | D | Z |
| 9 | 2 | .778 | .292 | .565 | .775 |
| 15 | | .928 | .442 | .715 | .925 |
| 21 | | 1.078 | .592 | .865 | 1.075 |
| 25 | | 1.178 | .692 | .965 | 1.175 |
| 31 | | 1.328 | .842 | 1.115 | 1.080 |
| 37 | | 1.478 | .992 | 1.265 | 1.180 |
| 51 | 3 | 1.428 | .942 | 1.215 | 1.220 |

Please reference MSHTM-DIM-1 for more detail.

ORDER FORM

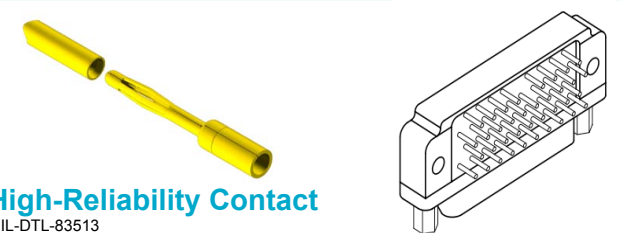
Sample Part Number Format: **MSHT-252-037-323-220S**

| MSHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|---|---|---|---|---|---|--|--|--|
| SERIES 0.050" Low-Profile Metal PC Board-Mount Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE 5 – Plug, right angle, narrow footprint with threaded inserts. | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | CONTACT/TERMINATION TYPE 32 – Pin, right angle, 0.109" x 0.020" dia 33 – Pin, right angle, 0.140" x 0.020" dia 34 – Pin, right angle, 0.172" x 0.020" dia | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | POLARIZATION 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MSHT-252-037-323-220S



High-Reliability Contact
MIL-DTL-83513

MATERIALS and FINISHES

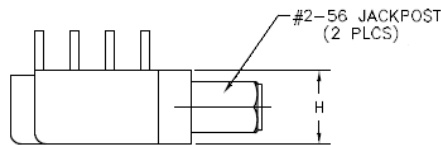
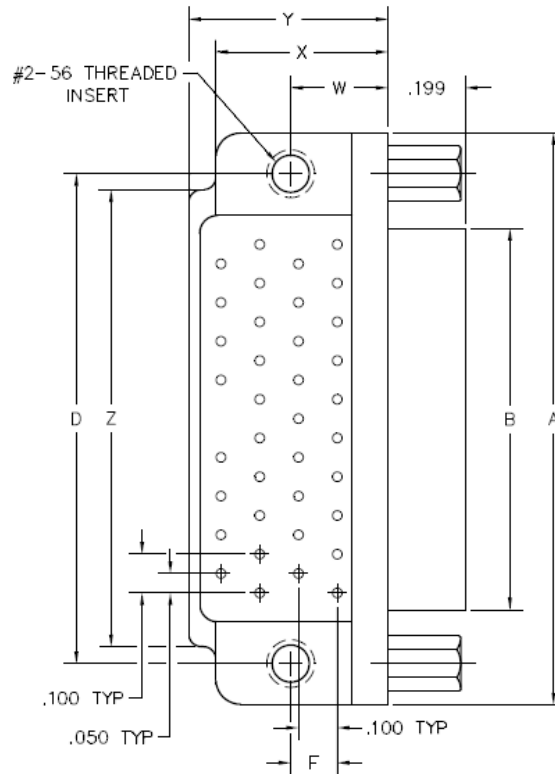
Pin Contacts: Copper-based alloy strip
Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
Molded Insulators: High-temp thermoplastic
Embedment: High-temp epoxy
Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
Tolerances: Angles: ±5° (unless otherwise specified)
Decimals: ±0.010"; Fractions: ±1/64"
Wire lengths – insulated/stranded: +1.0"/-0.0"
uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
Operating Temperature: -55° C to 205° C
Test Voltage: 600V, RMS, 60Hz
Insulation Resistance: 5,000 megohms minimum @ 500 VDC
Durability: 500 connector mating cycles
Contact Engaging Force: 6.0 ounces maximum/contact
Contact Separating Force: 0.5 ounces minimum/contact
Mating and Unmating Force: 10 ounces maximum/contact

MSHT MALE DRAWINGS



Right Angle
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | |
|------------|------|-------|---------|-------|------|------|------|---------|---------|-------|---------------|
| SIZE | ROWS | A | B (MAX) | D | F | H | W | X (MAX) | Y (MAX) | Z | HARDWARE |
| 9 | 2 | .778 | .292 | .565 | .120 | .208 | .250 | .420 | .420 | .775 | #2-56 UNC THD |
| 15 | | .928 | .442 | .715 | | | | | | .925 | |
| 21 | | 1.078 | .592 | .865 | | | | | | 1.075 | |
| 25 | | 1.178 | .692 | .965 | | | | 1.175 | | | |
| 31 | | 1.328 | .842 | 1.115 | | | | 1.080 | | | |
| 37 | | 1.478 | .992 | 1.265 | | | | 1.180 | | | |
| 51 | 3 | 1.428 | .942 | 1.215 | .150 | .250 | .300 | .425 | .650 | 1.220 | |

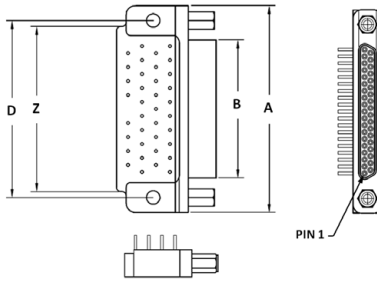
PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



MSHT – Right Angle, Board-Mount with Blind Clearance Cut (Male)

MSHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | |
|------------|------|-------|---------|-------|-------|---------------------------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE |
| 9 | 2 | .758 | .292 | .565 | .775 | #2-56 UNC THREADED INSERT |
| 15 | | .928 | .422 | .715 | .925 | |
| 21 | | 1.078 | .592 | .865 | 1.075 | |
| 25 | | 1.178 | .692 | .965 | 1.175 | |
| 31 | | 1.328 | .842 | 1.115 | 1.080 | |
| 37 | 3 | 1.478 | .992 | 1.265 | 1.180 | |
| 51 | | 1.428 | .942 | 1.215 | 1.220 | |

Please reference MSHTM-DIM-2 for more detail.

ORDER FORM

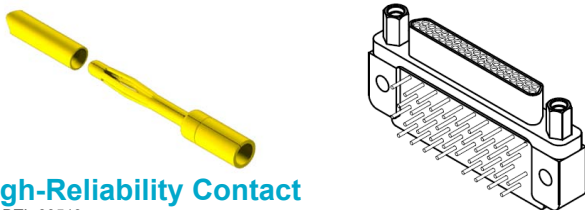
Sample Part Number Format: MSHT-2T3-037-323-220S

| | | | | | | | | |
|---|---|--|---|---|--|--|--|--|
| MSHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Low-Profile Metal PC Board-Mount Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE T – Plug, right angle (blind clearance cut), narrow footprint with threaded inserts | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 32 – Pin, right angle, PCB leads, 0.109" x 0.020" dia 33 – Pin, right angle, PCB leads, 0.140" x 0.020" dia 34 – Pin, right angle, PCB leads, 0.172" x 0.020" dia | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | WIRING 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MSHT-2T3-037-323-220S



High-Reliability Contact

MIL-DTL-83513

MATERIALS and FINISHES

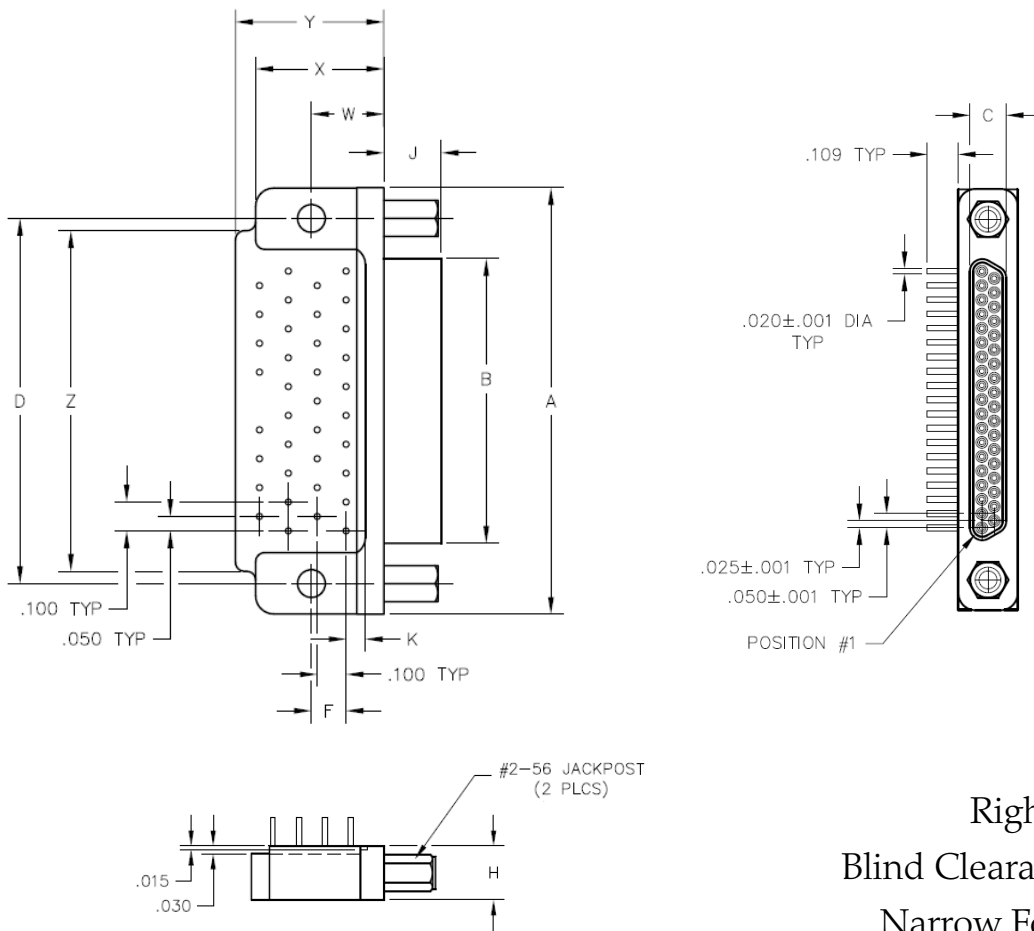
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5° (unless otherwise specified)
 Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0" insulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance: 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MSHT (BLIND CLEARANCE CUT) MALE DRAWINGS



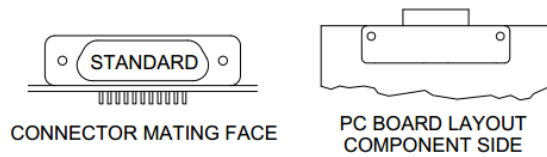
Right Angle
 Blind Clearance Cut
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|-------|------|------|------|------|---------|---------|------|---------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .758 | .292 | .134 | .565 | .020 | .208 | .199 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .928 | .422 | | .715 | .925 | | | | | | | | | |
| 21 | | 1.078 | .592 | | .865 | 1.075 | | | | | | | | | |
| 25 | | 1.178 | .692 | | .965 | 1.175 | | | | | | | | | |
| 31 | | 1.328 | .842 | | 1.115 | 1.080 | | | | | | | | | |
| 37 | | 1.478 | .992 | | 1.265 | 1.180 | | | | | | | | | |
| 51 | 3 | 1.428 | .942 | .177 | 1.215 | .150 | .250 | .087 | .300 | .425 | .650 | 1.220 | | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

Recommended PC Board Layouts – MSHT Male

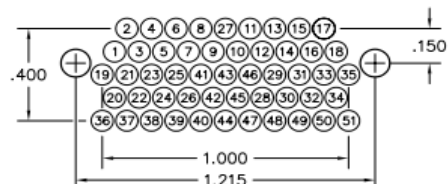
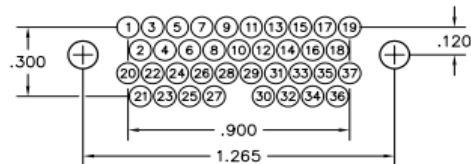
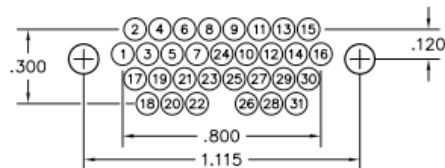
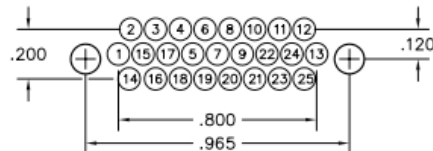
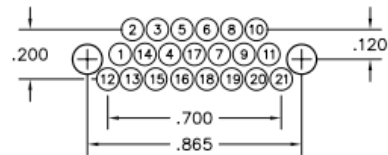
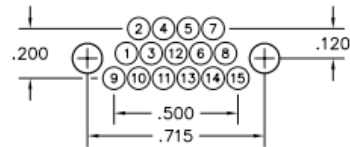
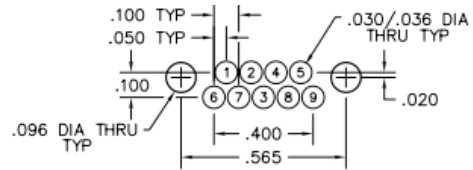
Right Angle
 Narrow Footprint
 Standard Polarization



CONNECTOR MATING FACE



PC BOARD LAYOUT COMPONENT SIDE





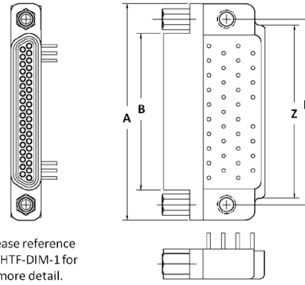
M **MICRO**
 0.050"
 (1.27 mm)



MSHT – Low-Profile, Right Angle Board-Mount (Female)

MSHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | |
|------------|------|-------|---------|-------|-------|---------------|
| SIZE | ROWS | A | B (MAX) | D | Z | HARDWARE |
| 9 | 2 | .778 | .378 | .565 | .775 | #2-56 UNC THD |
| 15 | | .928 | .528 | .715 | .925 | |
| 21 | | 1.078 | .678 | .865 | 1.075 | |
| 25 | | 1.178 | .778 | .965 | 1.175 | |
| 31 | | 1.328 | .928 | 1.115 | 1.080 | |
| 37 | 3 | 1.478 | 1.078 | 1.265 | 1.180 | |
| 51 | | 1.428 | 1.028 | 1.215 | 1.220 | |

ORDER FORM

Sample Part Number Format: **MSHT-262-037-433-220S**

| MSHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|---|---|--|---|---|---|--|--|--|
| SERIES 0.050" Low-Profile Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE 6 – Receptacle, right angle, narrow footprint with threaded inserts and interfacial seal. | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell 5 – High-temp with stainless steel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia, 44 – Socket, right angle, 0.140" x 0.020" dia, 45 – Socket, right angle, 0.172" x 0.020" dia, | PLATING 3 – 50 μ" Au contacts; Au terminations | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | POLARIZATION 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MATERIALS and FINISHES

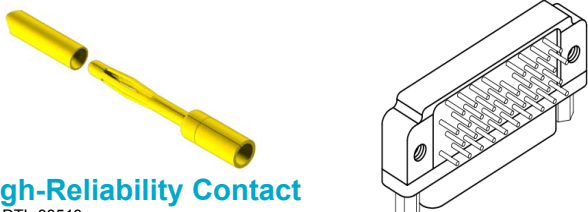
Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

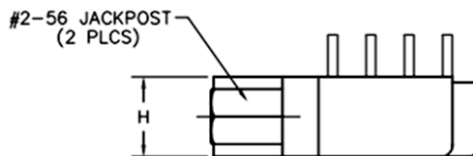
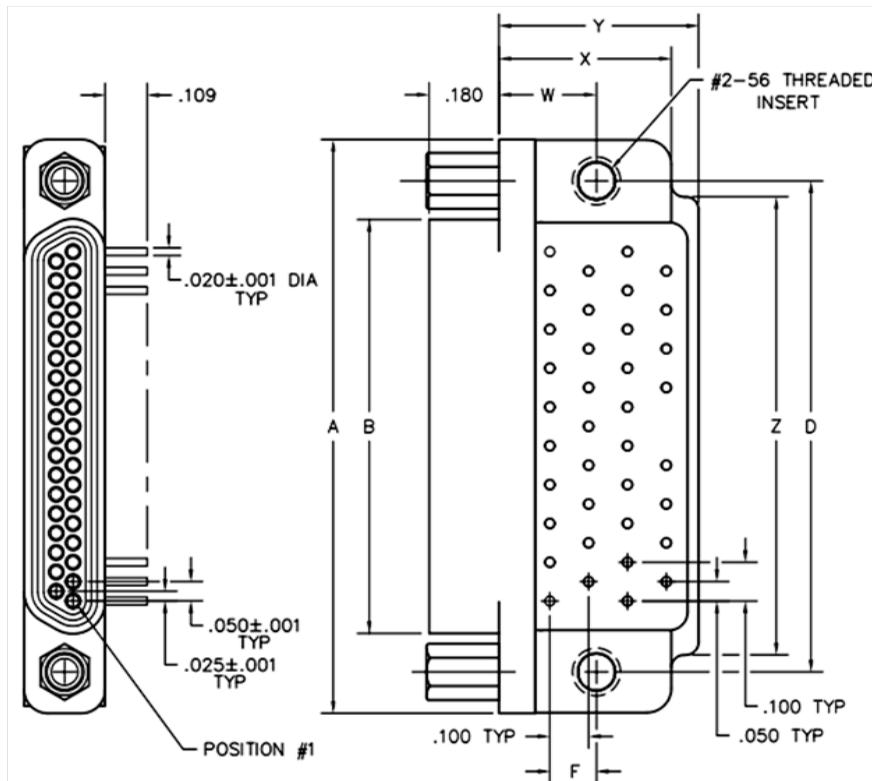
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MSHT-262-037-433-220S



High-Reliability Contact
 MIL-DTL-83513

MSHT FEMALE DRAWINGS



Right Angle
 Blind Clearance Cut
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|-------|------|------|------|------|---------|---------|-------|---------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .758 | .378 | .218 | .565 | .020 | .208 | .180 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .928 | .528 | | .715 | .925 | | | | | | | | | |
| 21 | | 1.078 | .678 | | .865 | 1.075 | | | | | | | | | |
| 25 | | 1.178 | .778 | | .965 | 1.175 | | | | | | | | | |
| 31 | | 1.328 | .928 | | 1.115 | 1.080 | | | | | | | | | |
| 37 | | 1.478 | 1.078 | | 1.265 | 1.180 | | | | | | | | | |
| 51 | 3 | 1.428 | 1.028 | .260 | 1.215 | .150 | .250 | | .087 | .300 | .425 | .650 | 1.220 | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

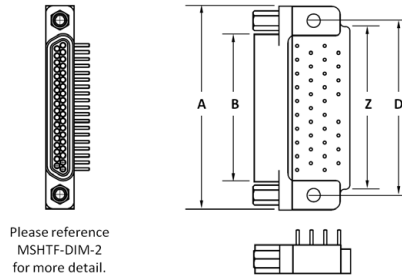
M **SERIES** **MICRO**
 0.050"
 (1.27 mm)



MSHT – Low-Profile, Right Angle Board-Mount with Blind Clearance Cut (Female)

MSHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | D | Z |
| 9 | 2 | .758 | .378 | .565 | .775 |
| 15 | | .928 | .528 | .715 | .925 |
| 21 | | 1.078 | .678 | .865 | 1.075 |
| 25 | | 1.178 | .778 | .965 | 1.175 |
| 31 | | 1.328 | .928 | 1.115 | 1.080 |
| 37 | 3 | 1.478 | 1.078 | 1.265 | 1.180 |
| 51 | | 1.428 | 1.028 | 1.215 | 1.220 |

ORDER FORM

Sample Part Number Format: **MSHT-2V3-037-435-220S**

| | | | | | | | | |
|---|---|--|---|---|--|--|--|--|
| MSHT | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
| SERIES 0.050" Low-Profile Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE V – Receptacle, right angle (blind clearance cut), narrow footprint with threaded inserts | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell 4 – High-temp thermoplastic with hard black anodized shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.020" dia 44 – Socket, right angle, 0.140" x 0.020" dia 45 – Socket, right angle, 0.172" x 0.020" dia | HARDWARE 00 – No hardware 22 – Two fixed jacknut assemblies | WIRING 0S – Standard body polarization |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MATERIALS and FINISHES

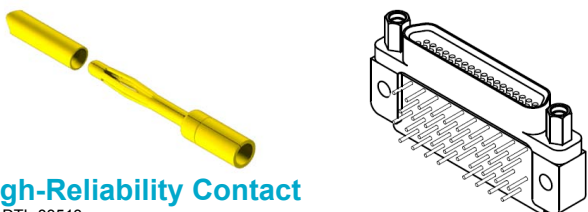
Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum or black anodized per MIL-A-8625, Type III Class 2, or 303 stainless steel per ASTM A581/A581M or ASTM A582/A582M, passivated per SAE AMS-2700
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

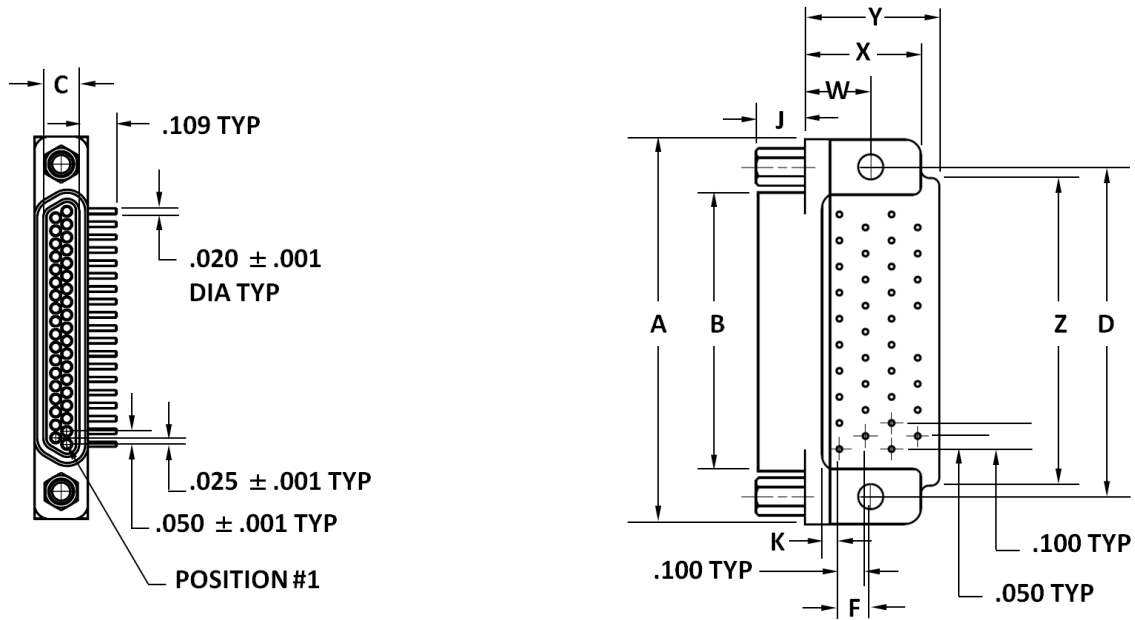
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MSHT-2V3-037-435-220S

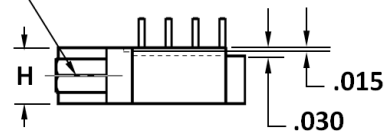


High-Reliability Contact
 MIL-DTL-83513

MSHT (BLIND CLEARANCE CUT) FEMALE DRAWINGS



#2-56 JACKPOST
(2 PLCS)



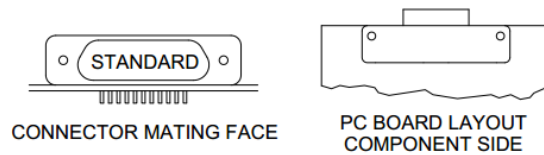
Right Angle
 Blind Clearance Cut
 Narrow Footprint
 Threaded Inserts

| DIMENSIONS | | | | | | | | | | | | | | | |
|------------|------|-------|---------|------|-------|------|------|------|------|------|---------|---------|-------|---------------|---------------------------|
| SIZE | ROWS | A | B (MAX) | C | D | F | H | J | K | W | X (MAX) | Y (MAX) | Z | HARDWARE | MOUNTING HOLE |
| 9 | 2 | .758 | .378 | .218 | .565 | .120 | .208 | .180 | .067 | .250 | .420 | .420 | .775 | #2-56 UNC THD | #2-56 UNC THREADED INSERT |
| 15 | | .928 | .528 | | .715 | | | | | | | | .925 | | |
| 21 | | 1.078 | .678 | | .865 | | | | | | | | 1.075 | | |
| 25 | | 1.178 | .778 | | .965 | | | | | | | | 1.175 | | |
| 31 | | 1.328 | .928 | | 1.115 | | | | | | | | 1.080 | | |
| 37 | | 1.478 | 1.078 | | 1.265 | | | | | | | | 1.180 | | |
| 51 | 3 | 1.428 | 1.028 | .260 | 1.215 | .150 | .250 | | .087 | .300 | .425 | .650 | 1.220 | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

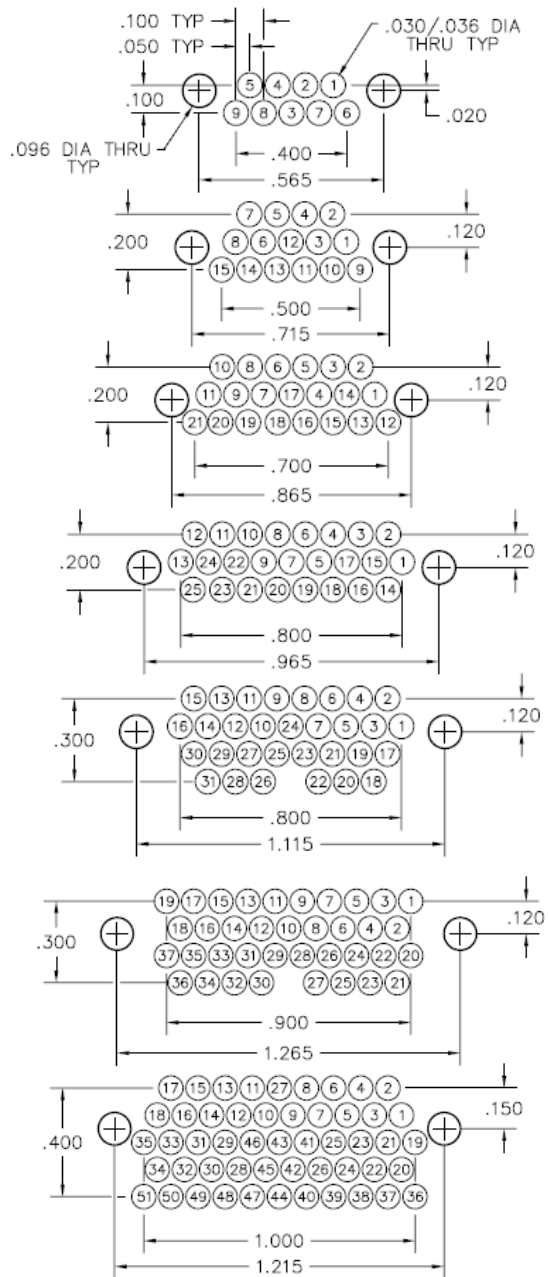
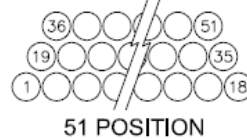
Recommended PC Board Layouts – MSHT Female

Right Angle
 Narrow Footprint
 Standard Polarization



CONNECTOR MATING FACE

PC BOARD LAYOUT COMPONENT SIDE





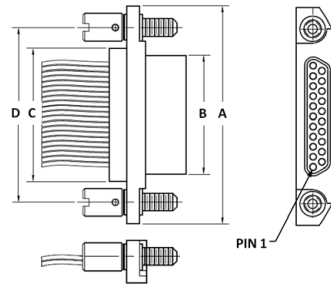
M **MICRO**
0.050"
(1.27 mm)



MTHT – Low-Profile I/O Cable with Radius Ear (Male)

MTHT interconnects are used in high-temperature applications. These low-profile connectors come with a variety of termination, hardware and wiring options. Custom lengths are available on wire termination products.

DIMENSIONS



| DIMENSIONS | | | | | |
|------------|------|-------|---------|-------|-------|
| SIZE | ROWS | A | B (MAX) | C | D |
| 9 | 2 | .778 | .292 | .398 | .565 |
| 15 | | .928 | .442 | .548 | .715 |
| 21 | | 1.078 | .592 | .698 | .865 |
| 25 | | 1.178 | .692 | .798 | .965 |
| 31 | | 1.328 | .842 | .948 | 1.115 |
| 37 | 3 | 1.478 | .992 | 1.098 | 1.265 |
| 51 | | 1.428 | .942 | 1.048 | 1.215 |

Please reference MTHTM-DIM-1 for more detail.

ORDER FORM

Sample Part Number Format: **MTHT-212-021-161-43WQ**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|--|---|--|---|---|--|--|--|---|
| MTHT | | | | | | | | |
| SERIES 0.050" Low-Profile Metal I/O Connector (Male) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE 1 – Plug, straight with ears. Low-profile radius. | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | PLATING 1 – 50 μ" Au contacts (crimp wire) 3 – 50 μ" Au contacts; Au terminations (solder cup, pigtail) | CONTACT/TERMINATION TYPE 1A – Pin, straight, 24 awg solder cup 11 – Pin, straight, 26 awg solder cup 12 – Pin, straight, 0.125" lead length* 13 – Pin, straight, 0.250" lead length* 14 – Pin, straight, 0.500" lead length* 16 – Pin, straight, crimped wire | HARDWARE 00 – No hardware 41 – Two turning jackscrews, allen head 43 – Two turning jackscrews, slot head | WIRING 00 – None XX – See Wiring Codes |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

* 0.018 diameter

MATERIALS and FINISHES

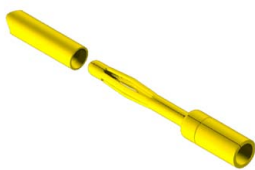
Pin Contacts: Copper-based alloy strip
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

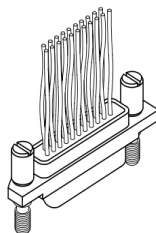
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MTHT-212-021-161-43WQ

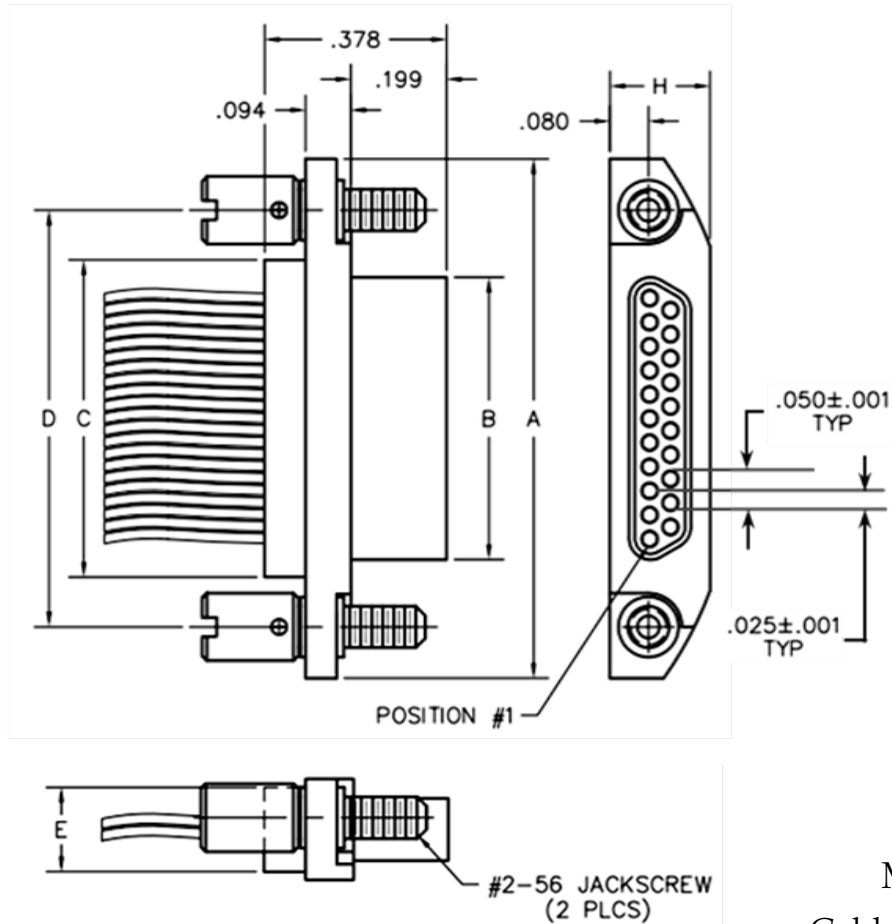


High-Reliability Contact

MIL-DTL-83513



MTHT MALE DRAWINGS



Straight
 Multi-Row
 Cable-to-Cable

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|---------|------|---------------|
| SIZE | ROWS | A | B (MAX) | C | D | E (MAX) | H | HARDWARE |
| 9 | 2 | .778 | .292 | .398 | .565 | .173 | .208 | #2-56 UNC THD |
| 15 | | .928 | .442 | .548 | .715 | | | |
| 21 | | 1.078 | .592 | .698 | .865 | | | |
| 25 | | 1.178 | .692 | .798 | .965 | | | |
| 31 | | 1.328 | .842 | .948 | 1.115 | | | |
| 37 | 3 | 1.478 | .992 | 1.098 | 1.265 | .220 | .250 | #2-56 UNC THD |
| 51 | | 1.428 | .942 | 1.048 | 1.215 | | | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.



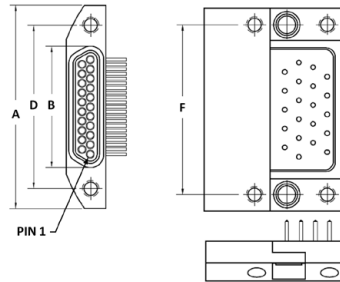
M **MICRO**
 0.050"
 (1.27 mm)



MTHT – Low-Profile, Right Angle Board-Mount with Radius Ear (Female)

MTHT interconnects are used in high-temperature applications where a right angle, plated thru-hole termination is desired for mounting. The narrow footprint on this connector helps save board space.

DIMENSIONS



| DIMENSIONS | | | | | | | | | |
|------------|------|-------|---------|-------|-------|------|------|---------|---------------|
| SIZE | ROWS | A | B (MAX) | D | F | H | W | Y (MAX) | HARDWARE |
| 9 | | .778 | .378 | .565 | .600 | | | | |
| 15 | | .928 | .528 | .715 | .750 | | | | |
| 21 | 2 | 1.078 | .678 | .865 | .900 | .208 | .250 | .420 | #2-56 UNC THD |
| 25 | | 1.178 | .778 | .965 | 1.000 | | | | |
| 31 | | 1.328 | .928 | 1.115 | 1.150 | | | | |
| 37 | | 1.478 | 1.078 | 1.265 | 1.300 | | | .520 | |
| 51 | 3 | 1.428 | 1.028 | 1.215 | 1.250 | .250 | .300 | .650 | |

Please reference MTHTF-DIM-1 for more detail.

ORDER FORM

Sample Part Number Format: **MTHT-2E2-021-433-000S**

| ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE | ENTER CODE |
|---|---|---|---|---|--|--|---|---|
| MTHT | | | | | | | | |
| SERIES 0.050" Low-Profile Metal PC Board-Mount Connector (Female) | ROWS 2 – 2-Row (9-37 contacts) 3 – 3-Row (51 contacts) | BODY STYLE E – Receptacle, right angle, with four mounting holes. Low-profile radius. | BODY MATERIAL 2 – High-temp thermoplastic with electroless nickel shell | SIZE 009 – 9 Contacts 015 – 15 Contacts 021 – 21 Contacts 025 – 25 Contacts 031 – 31 Contacts 037 – 37 Contacts 051 – 51 Contacts | PLATING 3 – 50 μ" Au contacts; Au terminations (solder cup, pigtail) | POLARIZATION 0S – Standard body polarization | CONTACT/TERMINATION TYPE 43 – Socket, right angle, 0.109" x 0.016" dia. 44 – Socket, right angle, 0.140" x 0.016" dia. 45 – Socket, right angle, 0.172" x 0.016" dia. | HARDWARE 00 – Integrated jacknuts |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

MATERIALS and FINISHES

Socket Contact: Brass per ASTM B121/B121M or ASTM B16/B16M or ASTM B453
 Contact Finish: Gold plate per ASTM B488, SAE AMS-2422
 Shells: Aluminum alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8
 Shell Finishes: Electroless nickel per SAE AMS-2402, Class 3, 500 μ" minimum
 Molded Insulators: High-temp thermoplastic
 Embedment: High-temp epoxy
 Hardware: Corrosion-resistant steel per ASTM A582/A582M, passivated per ASTM A967, SAE AMS-QQ-P-35
 Interfacial Seal Gaskets: Fluorosilicone per SAE AMS-R-25988
 Tolerances: Angles: ±5°
 (unless otherwise specified) Decimals: ±0.010"; Fractions: ±1/64"
 Wire lengths – insulated/stranded: +1.0"/-0.0"
 uninsulated/solid: +0.02"/-0.0"

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

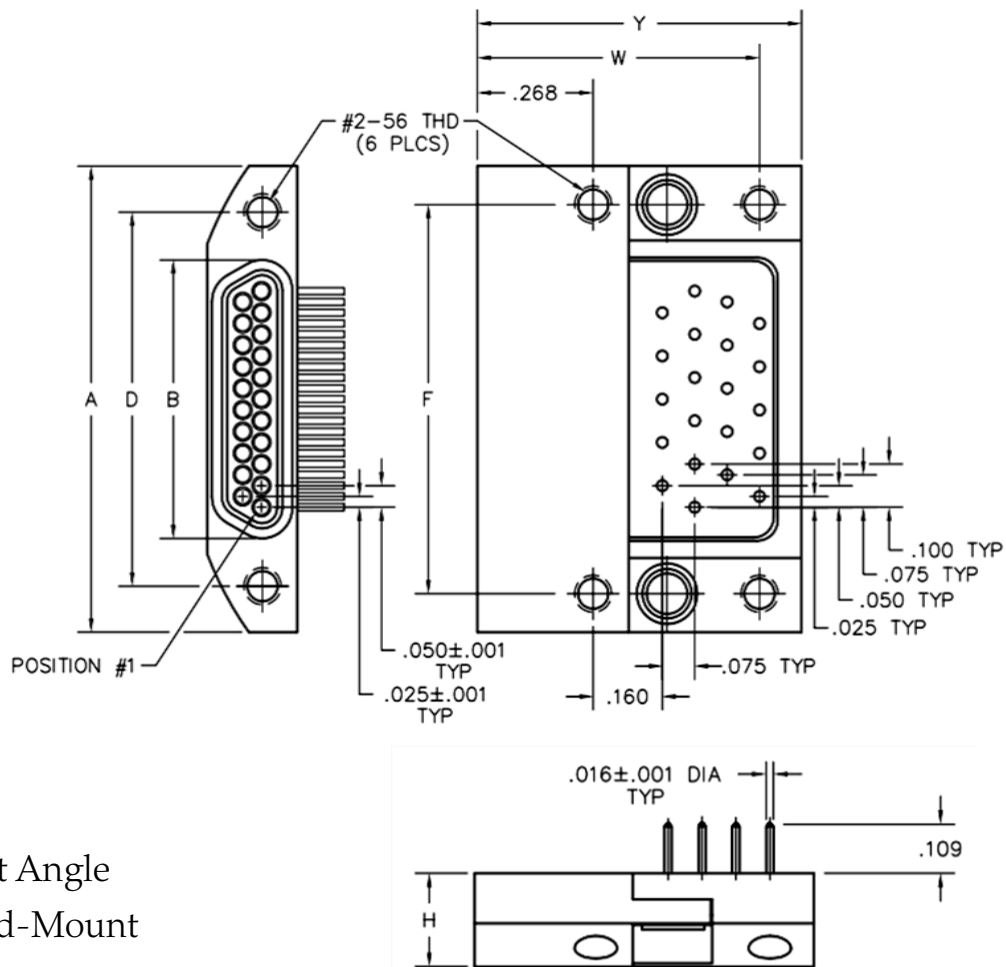
Contact Rating: 3 amperes maximum
 Operating Temperature: -55° C to 205° C
 Test Voltage: 600V, RMS, 60Hz
 Insulation Resistance 5,000 megohms minimum @ 500 VDC
 Durability: 500 connector mating cycles
 Contact Engaging Force: 6.0 ounces maximum/contact
 Contact Separating Force: 0.5 ounces minimum/contact
 Mating and Unmating Force: 10 ounces maximum/contact

MTHT-2E2-021-433-000S



High-Reliability Contact
 MIL-DTL-83513

MTHT FEMALE DRAWINGS



Right Angle
 Board-Mount
 Narrow Footprint

| DIMENSIONS | | | | | | | | |
|------------|------|-------|---------|-------|-------|---------|------|---------------|
| SIZE | ROWS | A | B (MAX) | C | D | E (MAX) | H | HARDWARE |
| 9 | 2 | .778 | .292 | .398 | .565 | .173 | .208 | #2-56 UNC THD |
| 15 | | .928 | .442 | .548 | .715 | | | |
| 21 | | 1.078 | .592 | .698 | .865 | | | |
| 25 | | 1.178 | .692 | .798 | .965 | | | |
| 31 | | 1.328 | .842 | .948 | 1.115 | | | |
| 37 | | 1.478 | .992 | 1.098 | 1.265 | | | |
| 51 | 3 | 1.428 | .942 | 1.048 | 1.215 | .220 | .250 | |

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

Recommended PC Board Layouts – MTHT Female

Low-Profile, Right Angle
 Standard Polarization
 Sizes 9–25

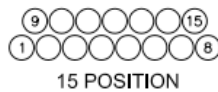
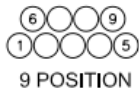


CONNECTOR MATING FACE

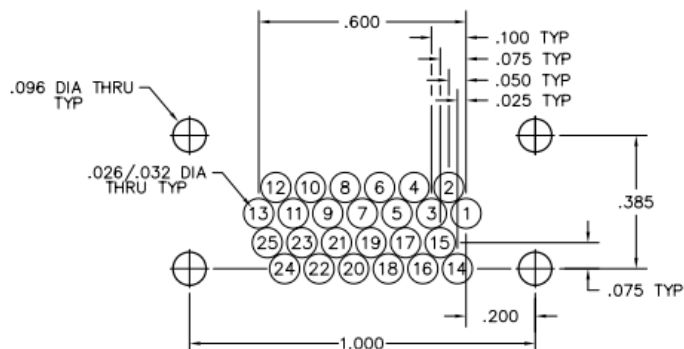
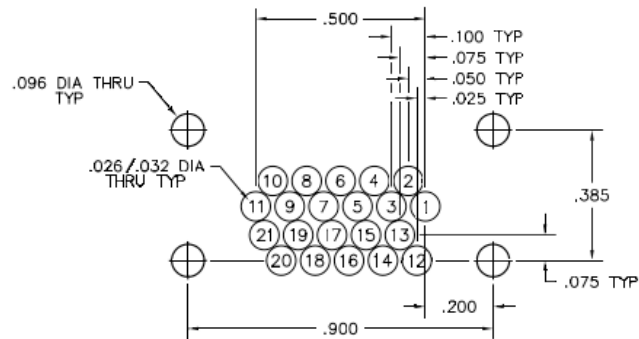
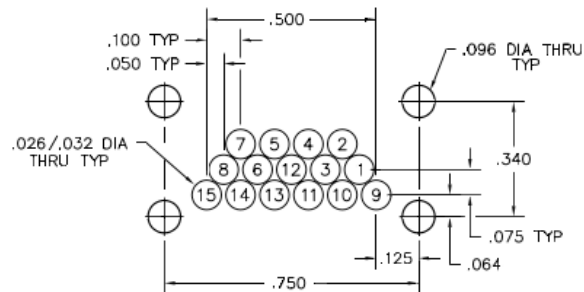
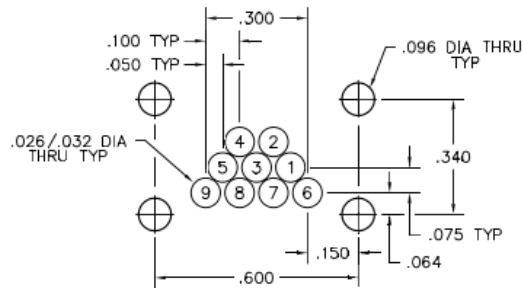


PC BOARD LAYOUT
 COMPONENT SIDE

CONNECTOR
 MATING FACE

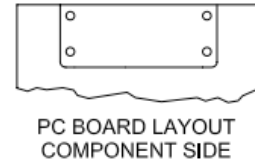
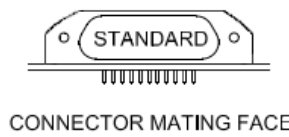


PC BOARD LAYOUT
 COMPONENT SIDE



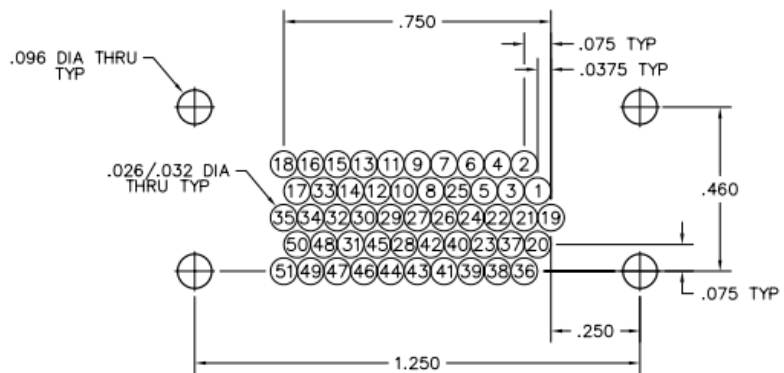
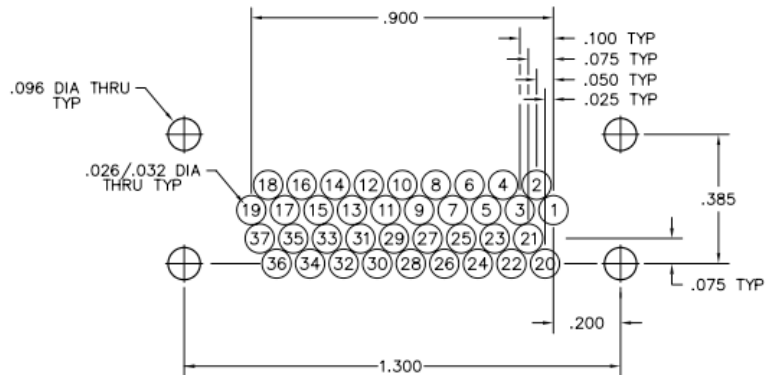
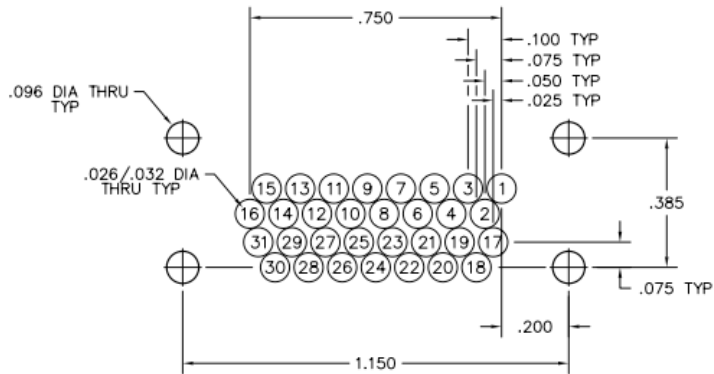
Recommended PC Board Layouts – MTHT Female

Low-Profile, Right Angle
 Standard Polarization
 Sizes 31–51



CONNECTOR
 MATING FACE

PC BOARD LAYOUT
 COMPONENT SIDE



WIRE CODES
M-Series
NEMA HP3-EXBEB (Formerly M16878/4-24 TFE 7 strand)

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| MIL-STD-681* | WA | WB | WC | UD | UE | WD | UG | UH | UJ | UK | UL | UM | UN | UP | UQ | UR |
| WHITE | WE | WF | WG | VD | VE | WH | VG | VH | VJ | VK | VL | VM | VN | VP | VQ | VR |
| YELLOW | WJ | WK | WL | | | WM | | | | | | | | | | |

NEMA HP3-EXBDB (Formerly M16878/4-26 TFE 7 strand)

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| MIL-STD-681* | WN | WP | WQ | YD | YE | WR | YG | YH | YJ | YK | YL | YM | YN | YP | YQ | YR |
| WHITE | WS | WT | WU | ZD | ZE | WV | ZG | ZH | ZJ | ZK | ZL | ZM | ZN | ZP | ZQ | ZR |
| YELLOW | WW | WX | WY | | | WZ | | | | | | | | | | |

NEMA HP3-EXBCB (Formerly M16878/4-28 TFE 7 strand)

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| MIL-STD-681* | XA | XB | XC | 1D | 1E | XD | 1G | 1H | 1J | 1K | 1L | 1M | 1N | 1P | 1Q | 1R |
| WHITE | XE | XF | XG | 2D | 2E | XH | 2G | 2H | 2J | 2K | 2L | 2M | 2N | 2P | 2Q | 2R |
| YELLOW | XJ | XK | XL | | | XM | | | | | | | | | | |

TWISTED PAIR per NEMA WC27500-XXRC2U00 (SAE AS22759/11)

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 24 AWG | AA | AB | AC | AD | AE | AF | AG | AH | AJ | AK | AL | AM | AN | AP | AQ | AR |
| 26 AWG | BA | BB | BC | BD | BE | BF | BG | BH | BJ | BK | BL | BM | BN | BP | BQ | BR |

TWISTED PAIR per NEMA WC27500-XXSC2U00 (SAE AS22759/33)* ☒**

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 24 AWG | JA | JB | JC | JD | JE | JF | JG | JH | JJ | JK | JL | JM | JN | JP | JQ | JR |
| 26 AWG | KA | KB | KC | KD | KE | KF | KG | KH | KJ | KK | KL | KM | KN | KP | KQ | KR |

For twisted pair wire connect charts, see page MA-9
Twisted pair wire not available on MA, MC or Hybrid connectors

NOTES

- * Connectors with more than 100 contacts will repeat color coding after 100 colors
- ** Wire colors per M83513 are ten solid colors, repeating
- *** Per M83513, corrosion has been experienced on connectors that are pre-wired with 22759/33 and stored in sealed environments.
Option is not RoHS-compliant

WIRE CODES
M-Series
SAE AS22759/11-24

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| M83513** | 5A | 5B | 5C | 5D | 5E | 5F | 5G | 5H | 5J | 5K | 5L | 5M | 5N | 5P | 5Q | 5R |
| MIL-STD-681* | CA | CB | CC | CD | CE | CF | CG | CH | CJ | CK | CL | CM | CN | CP | CQ | CR |
| WHITE | DA | DB | DC | DD | DE | DF | DG | DH | DJ | DK | DL | DM | DN | DP | DQ | DR |

SAE AS22759/11-26

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| M83513** | 6A | 6B | V1 | 6D | 6E | V2 | 6G | 6H | 6J | 6K | 6L | Y6 | 6N | 6P | 6Q | 6R |
| MIL-STD-681* | X3 | X4 | W3 | ED | EE | W4 | EG | EH | EJ | EK | EL | EM | EN | EP | EQ | ER |
| WHITE | X1 | X2 | W1 | FD | FE | W2 | FG | FH | FJ | FK | FL | Y5 | FN | FP | FQ | FR |

SAE AS22759/33-24*** ☒

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| M83513** | LA | LB | LC | LD | LE | LF | LG | LH | LJ | LK | LL | LM | LN | LP | LQ | LR |
| WHITE | MA | MB | MC | MD | ME | MF | MG | MH | MJ | MK | ML | MM | MN | MP | MQ | MR |

SAE AS22759/33-26*** ☒

| | 6" | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" | 84" | 96" | 108" | 120" |
|----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| M83513** | NA | NB | Y3 | ND | NE | Y4 | NG | NH | NJ | NK | NL | Y8 | NN | NP | NQ | NR |
| WHITE | PA | PB | Y1 | PD | PE | Y2 | PG | PH | PJ | PK | PL | Y7 | PN | PP | PQ | PR |

NOTES

- * Connectors with more than 100 contacts will repeat color coding after 100 colors
- ** Wire colors per M83513 are ten solid colors, repeating
- *** Per M83513, corrosion has been experienced on connectors that are pre-wired with 22759/33 and stored in sealed environments.
Option is not RoHS-compliant

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А