

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH  
LATCH AND EJECT, 452 SERIES

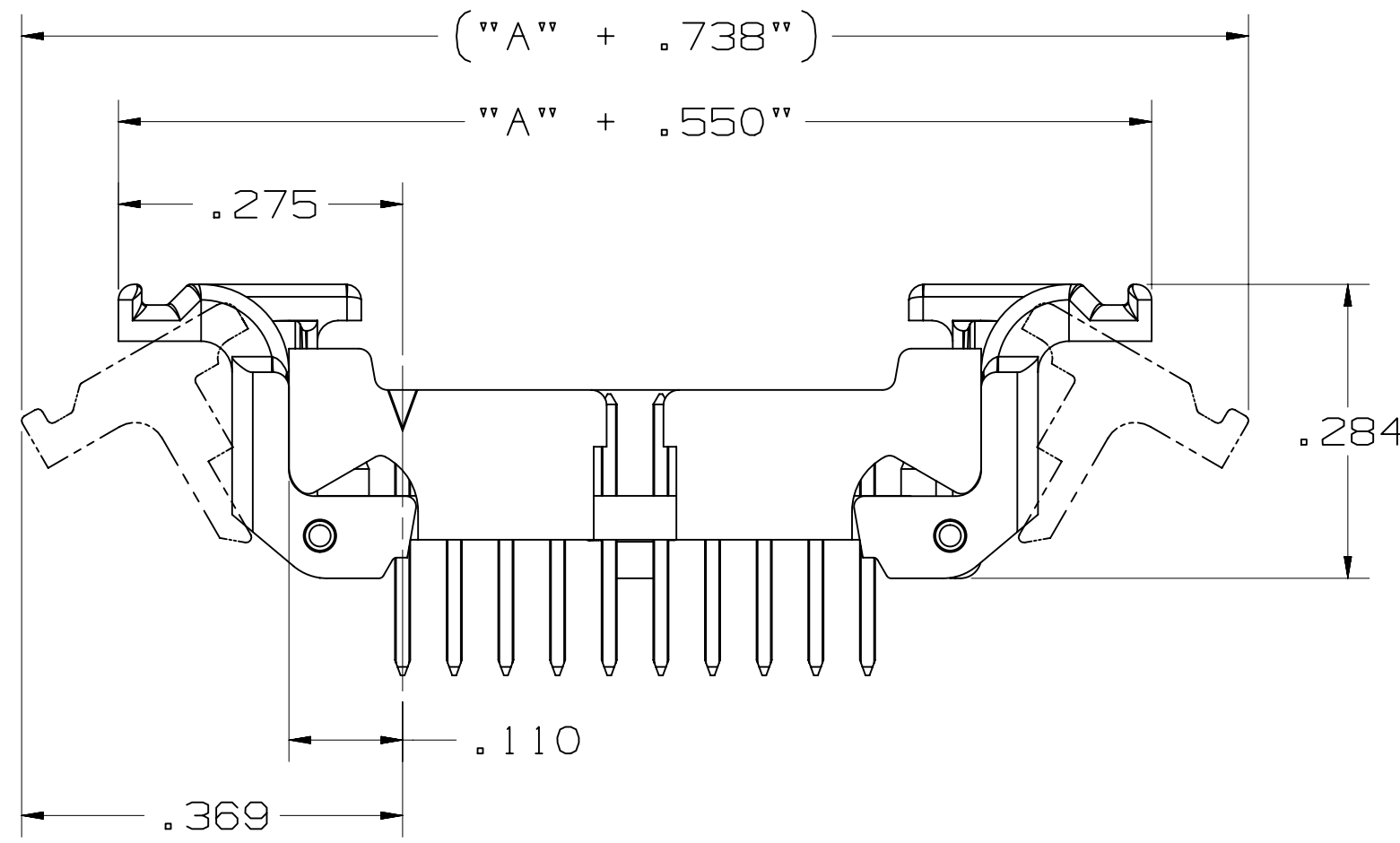
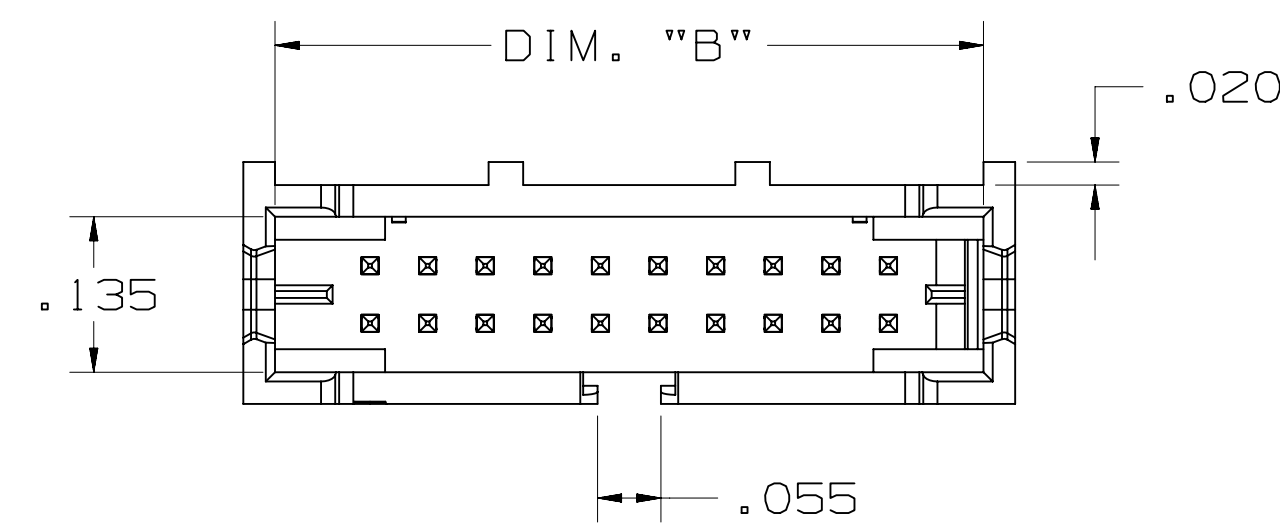
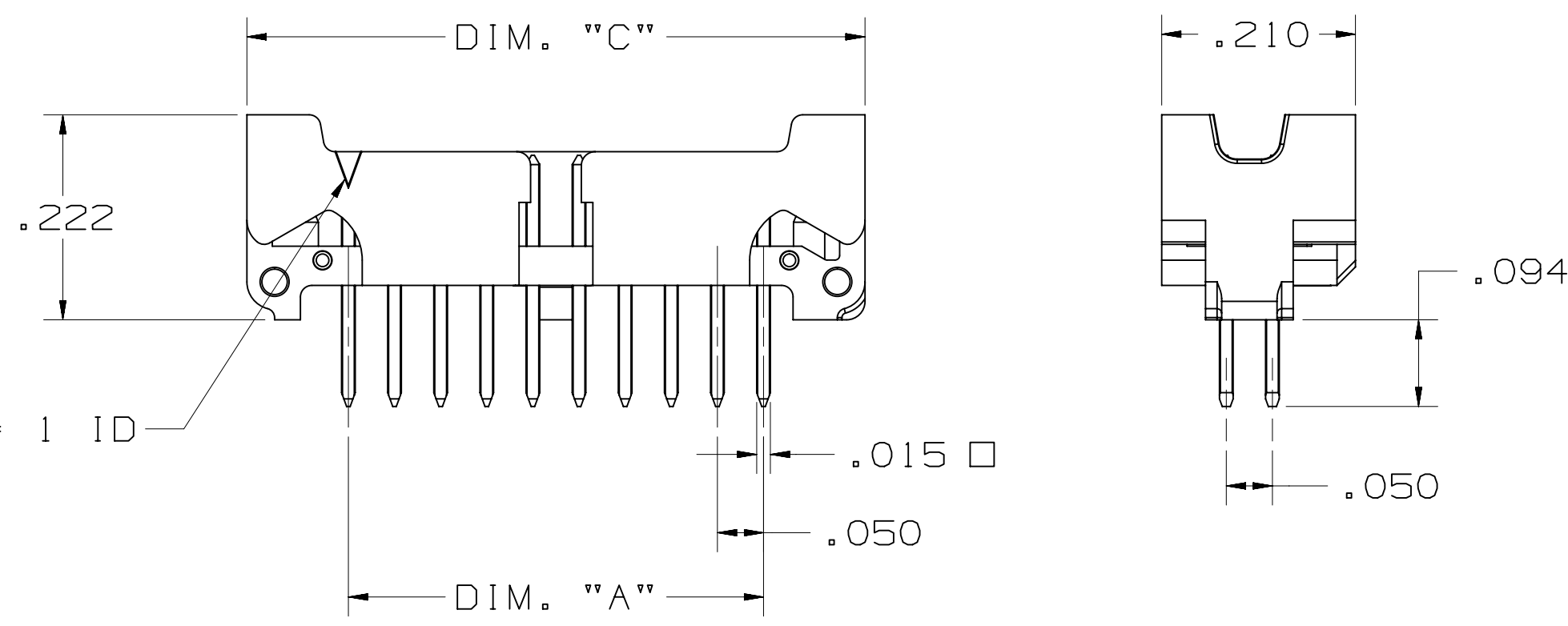


TABLE 1: VERTICAL THRU

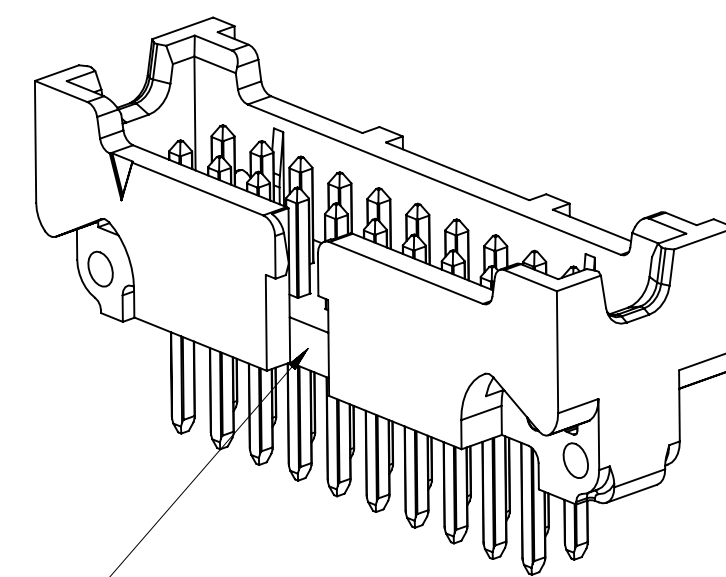
| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4             | .050    | .215    | .270    |
| 6             | .100    | .265    | .320    |
| 8             | .150    | .315    | .370    |
| 10            | .200    | .365    | .420    |
| 12            | .250    | .415    | .470    |
| 14            | .300    | .465    | .520    |
| 16            | .350    | .515    | .570    |
| 20            | .450    | .615    | .670    |
| 30            | .700    | .865    | .920    |

- NOTES
- MATERIAL: BODY: LCP, UL94V-0  
LATCH: PPA, UL94V-0  
CONTACTS: COPPER ALLOY.
  - PLATING: 50-150µ" NICKEL UNDERPLATE  
30 = 30µ" GOLD MIN. ON WIPING AREA WITH 200µ" MATTE TIN ON SOLDER TAIL  
00 = GOLD FLASH ON WIPING AREA WITH 100-140µ" MATTE TIN ON SOLDER TAIL.
  - MATING COMPATIBILITY: 3M 1.27mm (0.050"), 451 SERIES RIBBON CABLE SOCKET. TECH SHEET 2436
  - REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY)
  - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
  - REFERENCE PRODUCT SPEC: 3M DOC ID# 78-5102-0091-4
  - OTHER PIN COUNTS AVAILABLE UPON REQUEST. CONTACT 3M.
  - UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
  - PACKAGING: VERTICAL THRU: TRAY  
RIGHT ANGLE THRU: TRAY  
VERTICAL SMT: TAPE AND REEL.

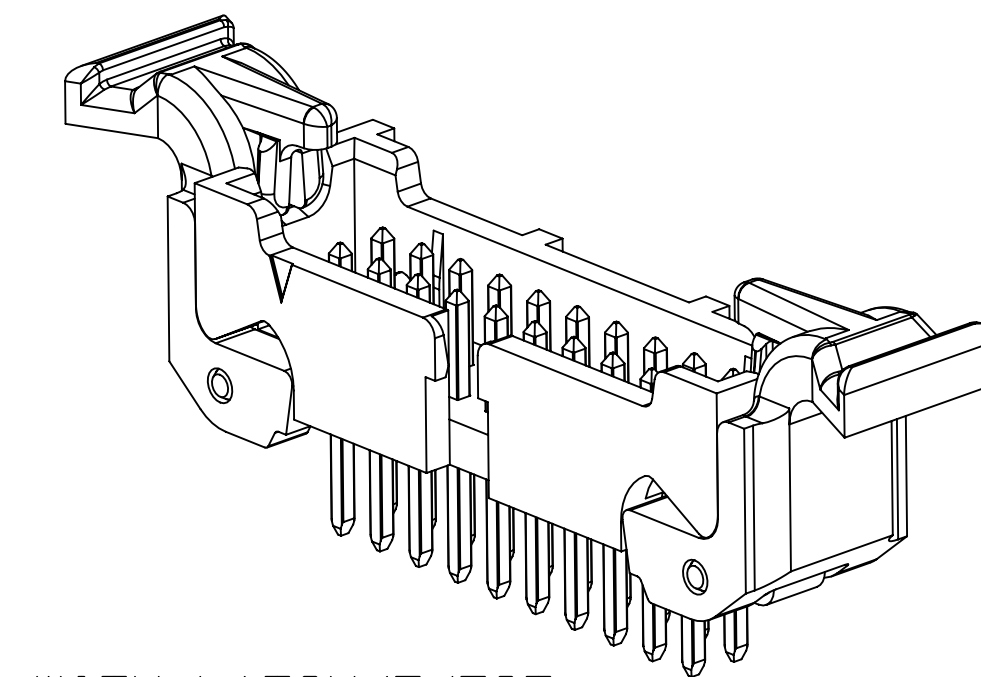
THRU BOARD, VERTICAL WITH LOW PROFILE LATCH/EJECT OPTION



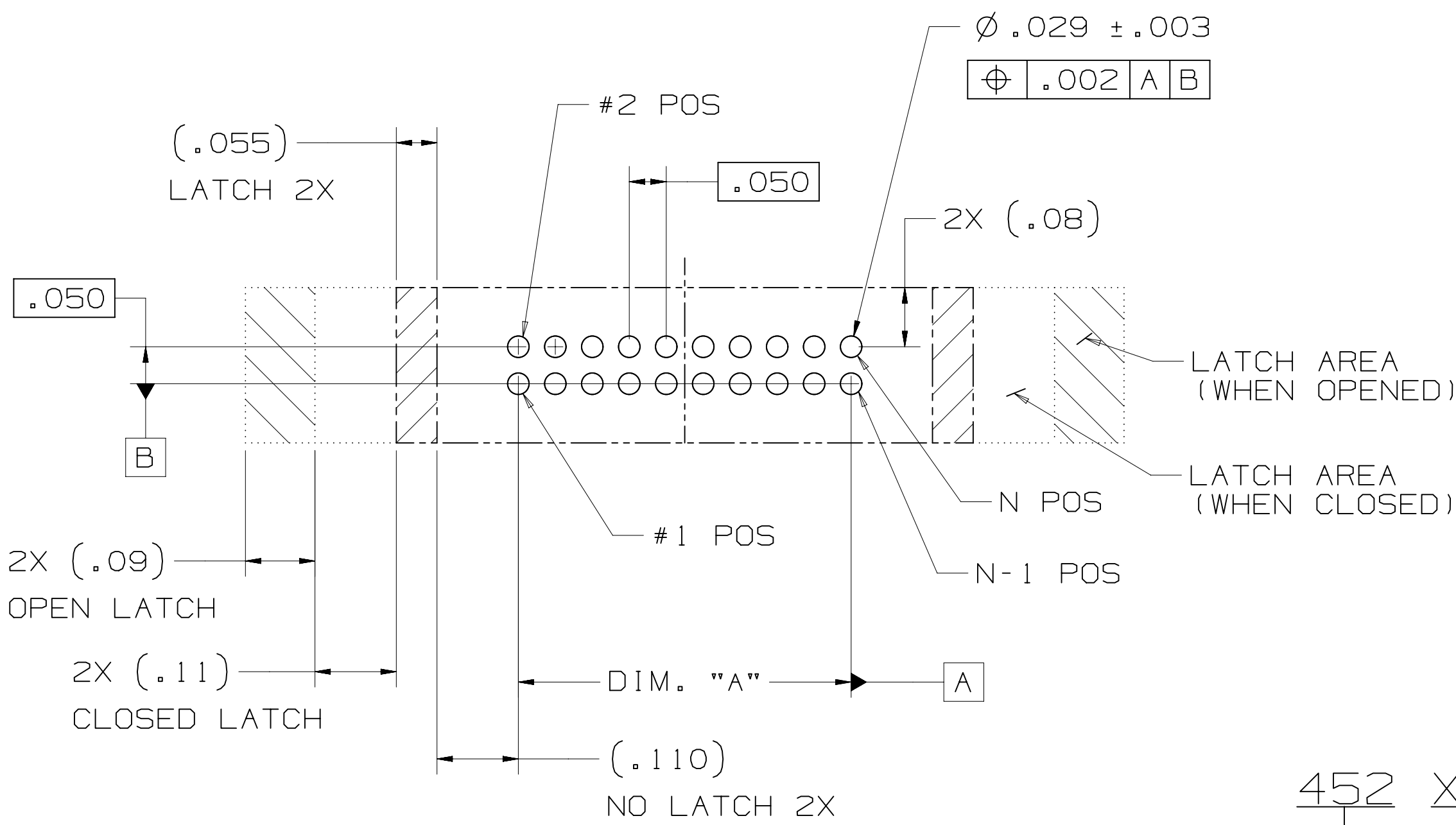
THRU BOARD, VERTICAL



POLARIZATION AND FRICTION LATCHING POSITIONS 8-30 ONLY



WITH LATCH/EJECT



RECOMMENDED BOARD LAYOUT

PERFORMANCE:

CURRENT RATING: 1.0 A, ALL LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70  
1.5 A, 6 LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70  
2.5 A, 1 LINE ENERGIZED, 30°C TEMP RISE PER EIA 364-70

UL & CUL VOLTAGE RATING: 125V<sub>ac</sub>  
INSULATION RESISTANCE: > 1 × 10<sup>9</sup> Ohms AT 500 VDC  
WITHSTANDING VOLTAGE: 1250VACrms AT SEA LEVEL  
OPERATING TEMPERATURE: -65°C to +125°C  
UL & CUL OPERATING TEMPERATURE: +125°C  
PROCESSING TEMPERATURE: 260°C  
LEAD-FREE SOLDERABLE: YES  
MOISTURE SENSITIVITY LEVEL: MSL1 PER J-STD-020

452 XX - X X 0 2 XX  
SERIES  
POSITION COUNT  
04 - 30  
SEE TABLE 1

PLATING  
00 = AU FLASH  
30 = 30µ" GOLD

CONTACT TAIL  
2 = STANDARD (.094")

PART CONFIG. AND PACKAGING  
6 = VERTICAL THRU HOLE, TRAY PACKAGING  
5 = RIGHT ANGLE THRU HOLE, TRAY PACKAGING  
2 = VERTICAL SMT, TAPE AND REEL WITH VAC CAP

3M ELECTRONIC MATERIALS SOLUTIONS DIVISION  
INTERCONNECT SOLUTIONS  
<http://www.3mconnectors.com>

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INFORMATION CALL 800-225-5373

**UL** FILE NO: E68080

78-5100-2436-3  
78-5100-2396-9

| REV | ECO   | ISSUE DATE AND DESCRIPTION                         | DRFT | CHKD |
|-----|-------|--|------|------|
| F   | 56988 | SEP 24, 2014<br>REVISE PERFORMANCE CHART           | JNC  | SN   |
| E   | 54514 | JUN 19, 2014<br>ADD UL LOGO, ADD 56MM T&R          | SJS  | SAN  |
| D   | 51884 | JAN 08, 2014<br>ADD DESIGN REF, UPDATE TITLE       | SJS  | SAN  |
| C   | 50290 | OCT 08, 2013<br>REVISE NOTE 1, 9 & OPERATING TEMP. | JNC  | SN   |
| B   | 48635 | JUL 12, 2013<br>MATCH TEXT FONTS & ADD NOTE 9      | JNC  | SN   |
| A   | 46797 | MAR 25, 2013<br>PRODUCTION RELEASE                 | JNC  | SAN  |

DESIGN REFERENCE: INTERCONNECT SOLUTIONS  
SCALE: 6-1  
TOLERANCES EXCEPT AS NOTED

INCHES: .00 ±.01, .00 ±.02, .000 ±.010, .0000 ±.0050  
MILLIMETERS: 0 ±.05, .00 ±.05, .00 ±.05, .00 ±.05

MAX SURFACE ROUGHNESS: 1.6 µm SURFACES  
MARKED ONLY

3M BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER: D78-5100-2437-1  
REV. NUMBER: F

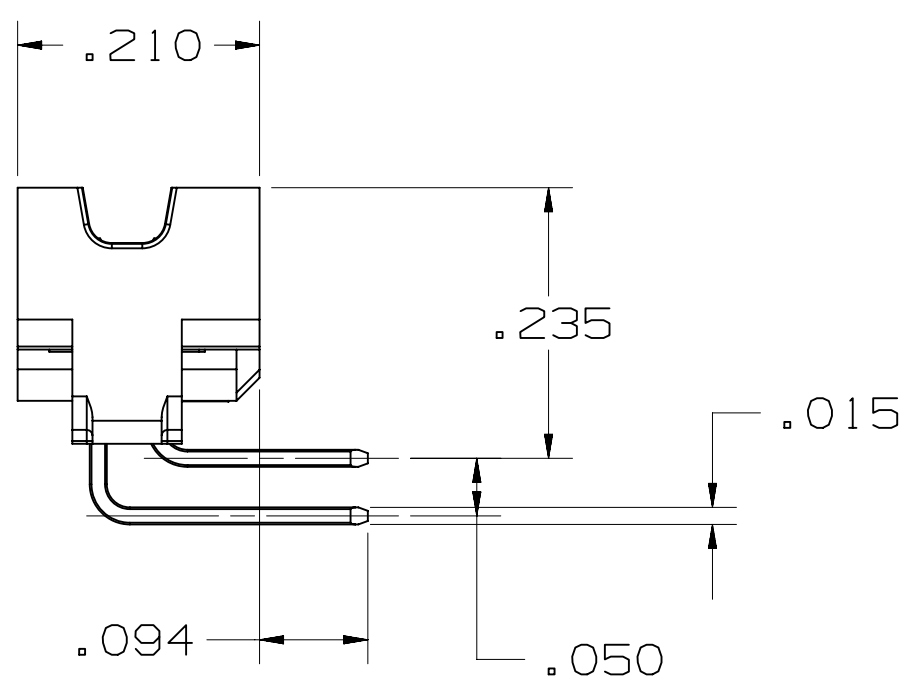
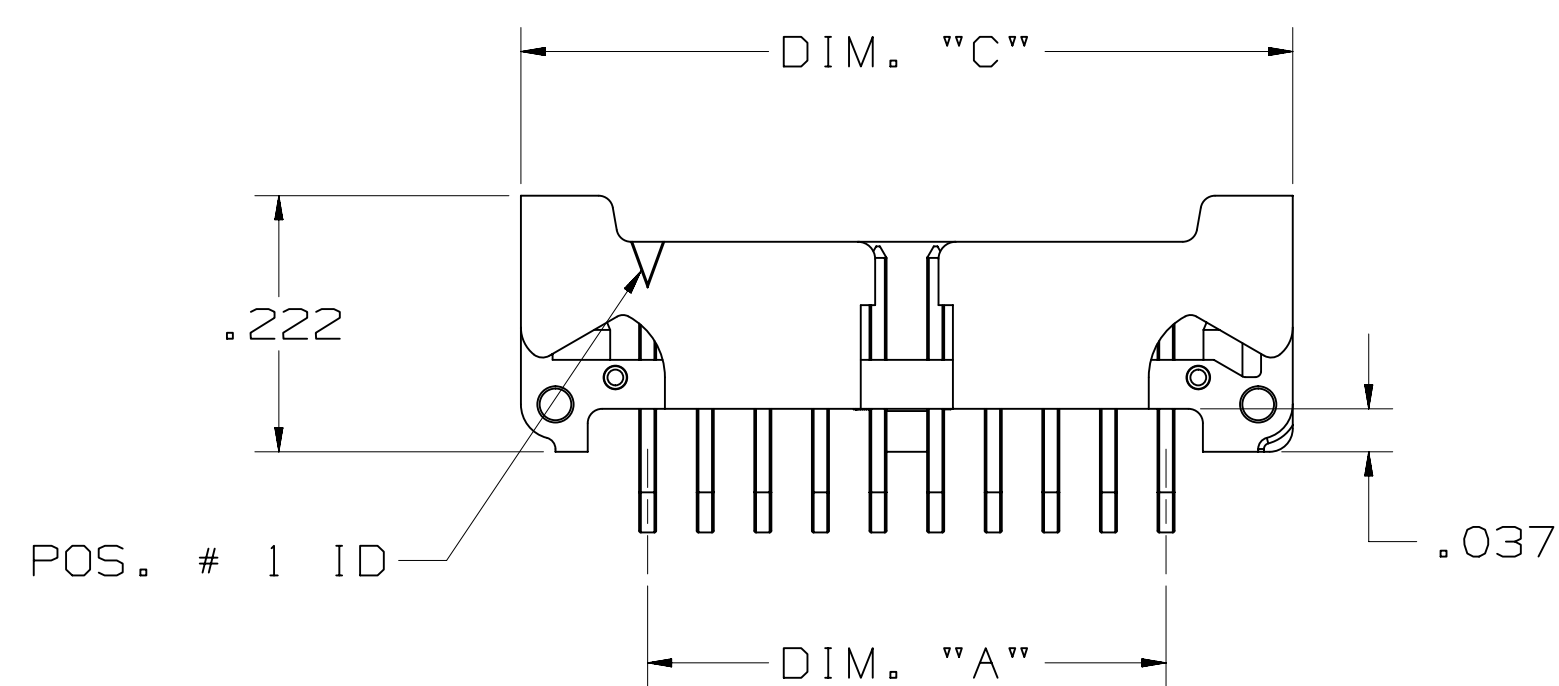
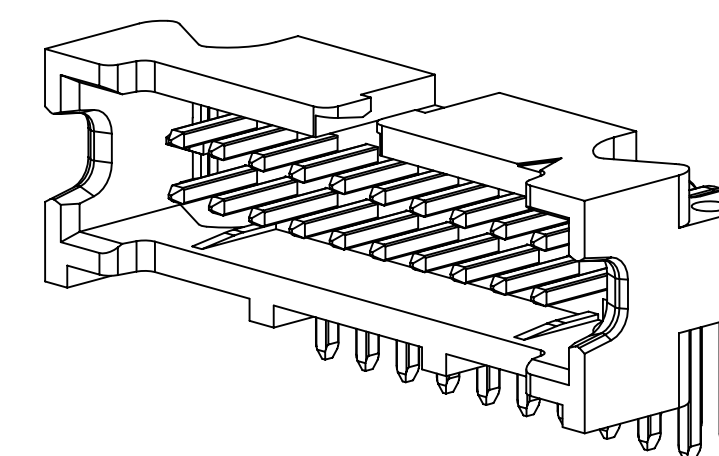
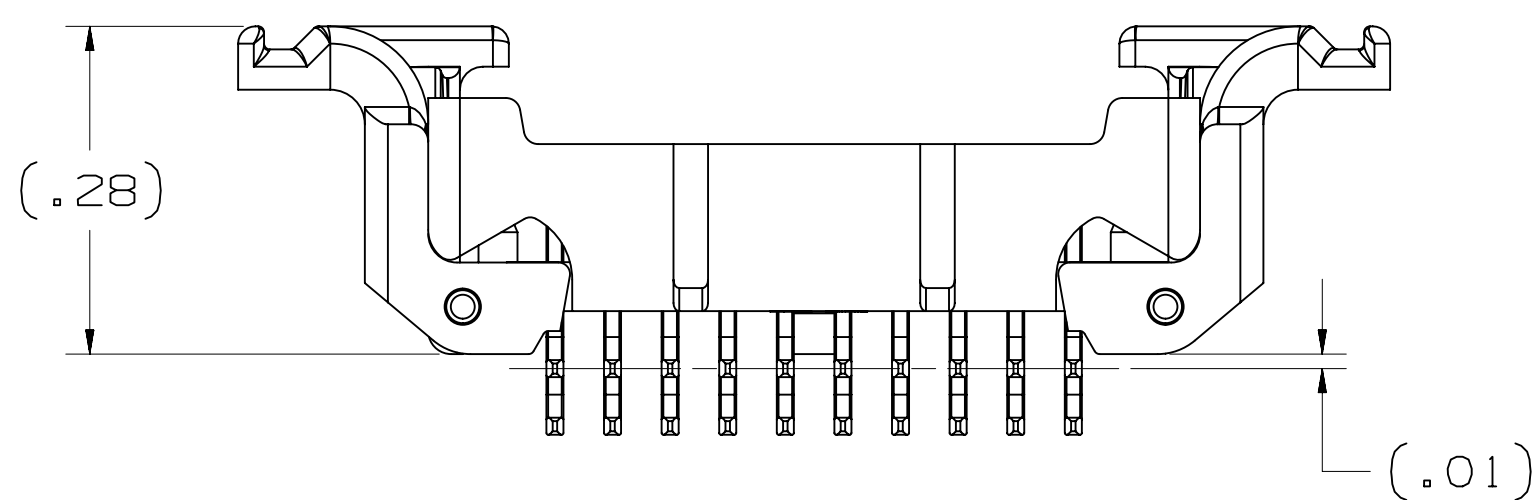
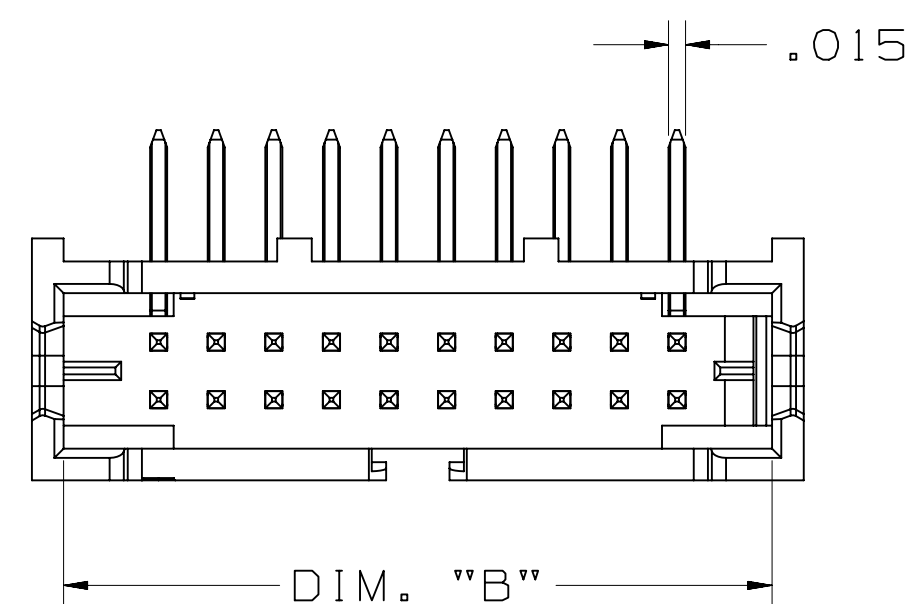
MODEL: SHT 1 OF 4

Imaged: F.1 9/24/2014 9:06 AM UTC-05:00

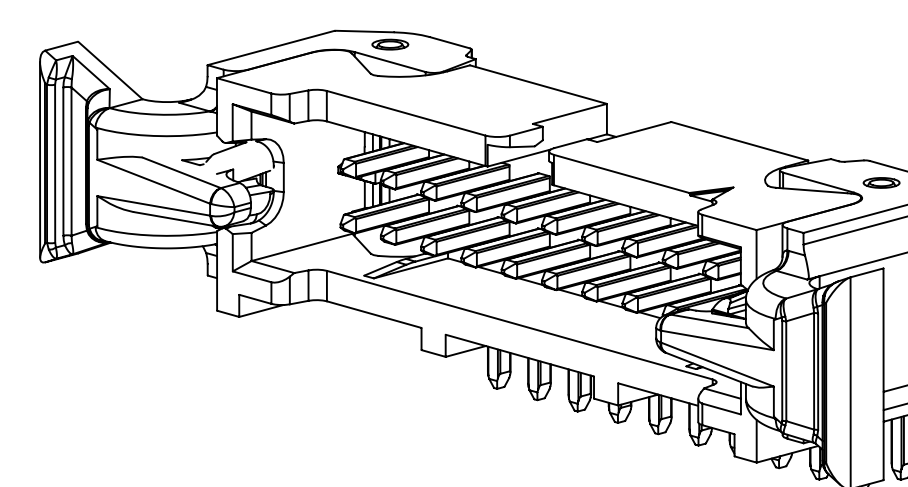
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH  
LATCH AND EJECT, 452 SERIES

TABLE 1: RIGHT ANGLE THRU

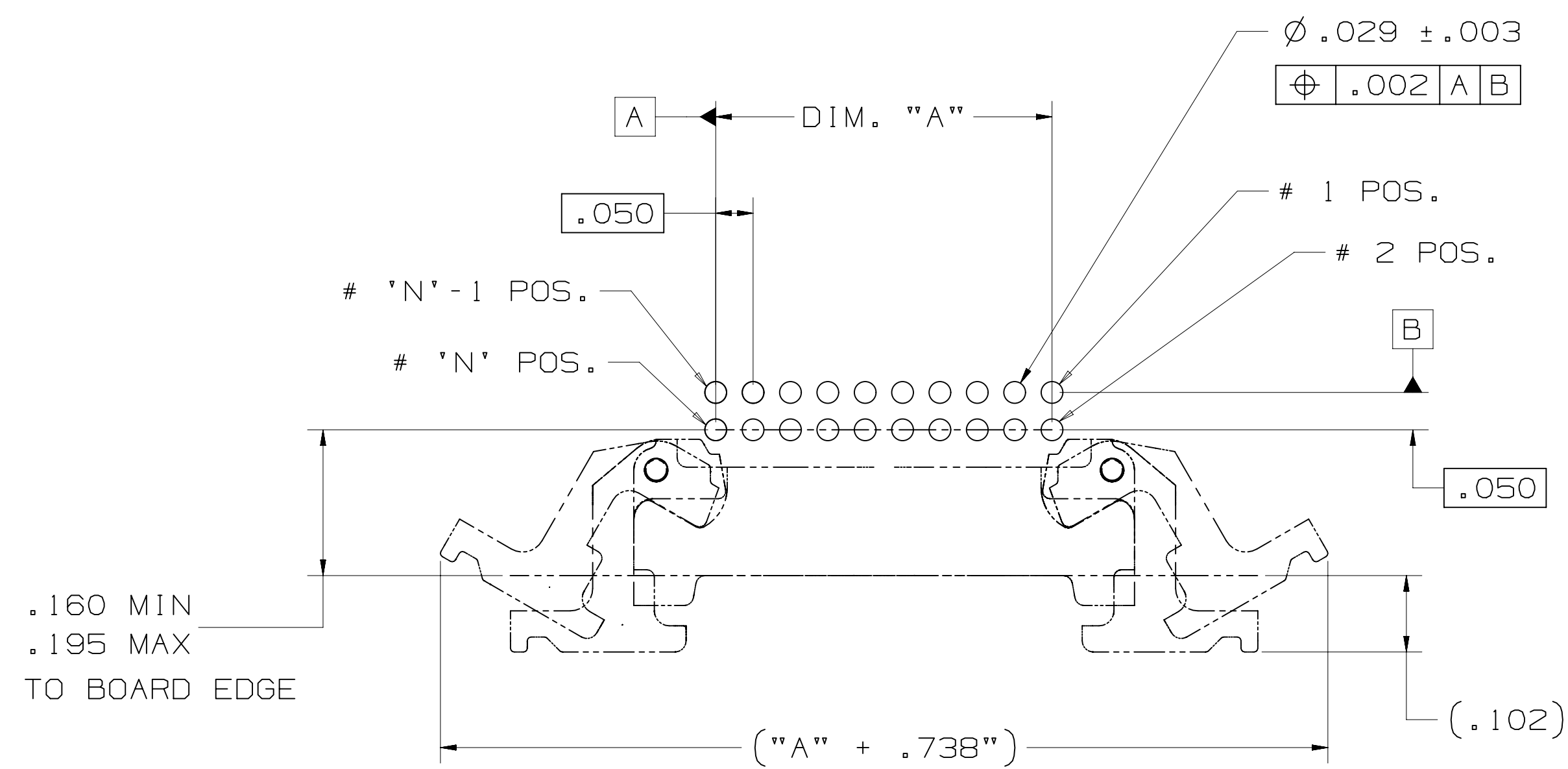
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|---------------|---------|---------|---------|
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| 6             | .100    | .265    | .320    |
| 8             | .150    | .315    | .370    |
| 10            | .200    | .365    | .420    |
| 12            | .250    | .415    | .470    |
| 14            | .300    | .465    | .520    |
| 16            | .350    | .515    | .570    |
| 20            | .450    | .615    | .670    |
| 30            | .700    | .865    | .920    |



THRU BOARD, RIGHT ANGLE



WITH LATCH/EJECT



RECOMMENDED BOARD LAYOUT

78-5100-2436-3  
78-5100-2396-9

DESIGN REFERENCE NEXT ASSEMBLY

REV. ECO. ISSUE DATE AND DESCRIPTION DRFT CHKD

DRFT ARM NOV 29,2012 PRC DATE NOV 29,2012

CHKD SAN NOV 29,2012 SAN DATE NOV 29,2012

DIVISION Interconnect Solutions DIVISION CODE ISD

DO NOT SCALE DRAWING SCALE 6 1 TOLERANCES EXCEPT AS NOTED

THIRD ANGLE PROJECTION INCHES .0 ±.1 .00 ±.02 .000 ±.010 .0000 ±.0050

INTERPRET PER ASME Y14.5 - 2009 MILLIMETERS 0 ± .0 .00 ± .00 .000 ± .000

MAX SURFACE ROUGHNESS SURFACES SURFACES MARKED ONLY ANGLES

|   |       |             |                                    |     |     |
|---|-------|-------------|------------------------------------|-----|-----|
| F | 56988 | SEP 24,2014 | REVISE PERFORMANCE CHART           | JNC | SN  |
| E | 54514 | JUN 19,2014 | ADD UL LOGO, ADD 56MM T&R          | SJS | SAN |
| D | 51884 | JAN 08,2014 | ADD DESIGN REF, UPDATE TITLE,      | SJS | SAN |
| C | 50290 | OCT 08,2013 | REVISE NOTE 1, 9 & OPERATING TEMP. | JNC | SN  |
| B | 48635 | JUL 12,2013 | MATCH TEXT FONTS & ADD NOTE 9      | JNC | SN  |
| A | 46797 | MAR 25,2013 | PRODUCTION RELEASE                 | JNC | SAN |

REV. ECO. ISSUE DATE AND DESCRIPTION DRFT CHKD

DRFT ARM NOV 29,2012 PRC DATE NOV 29,2012

CHKD SAN NOV 29,2012 SAN DATE NOV 29,2012

DIVISION Interconnect Solutions DIVISION CODE ISD

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THIRD ANGLE PROJECTION INCHES .0 ±.1 .00 ±.02 .000 ±.010 .0000 ±.0050

INTERPRET PER ASME Y14.5 - 2009 MILLIMETERS 0 ± .0 .00 ± .00 .000 ± .000

MAX SURFACE ROUGHNESS SURFACES SURFACES MARKED ONLY ANGLES

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TITLE BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER D78-5100-2437-1 REV. F

MODEL

DET. IJTs YES NO SHT 2 OF 4

78-5100-2437-1 F REVISION DRAWING NUMBER AM UTC-05:00 9:06 AM 9/24/2014

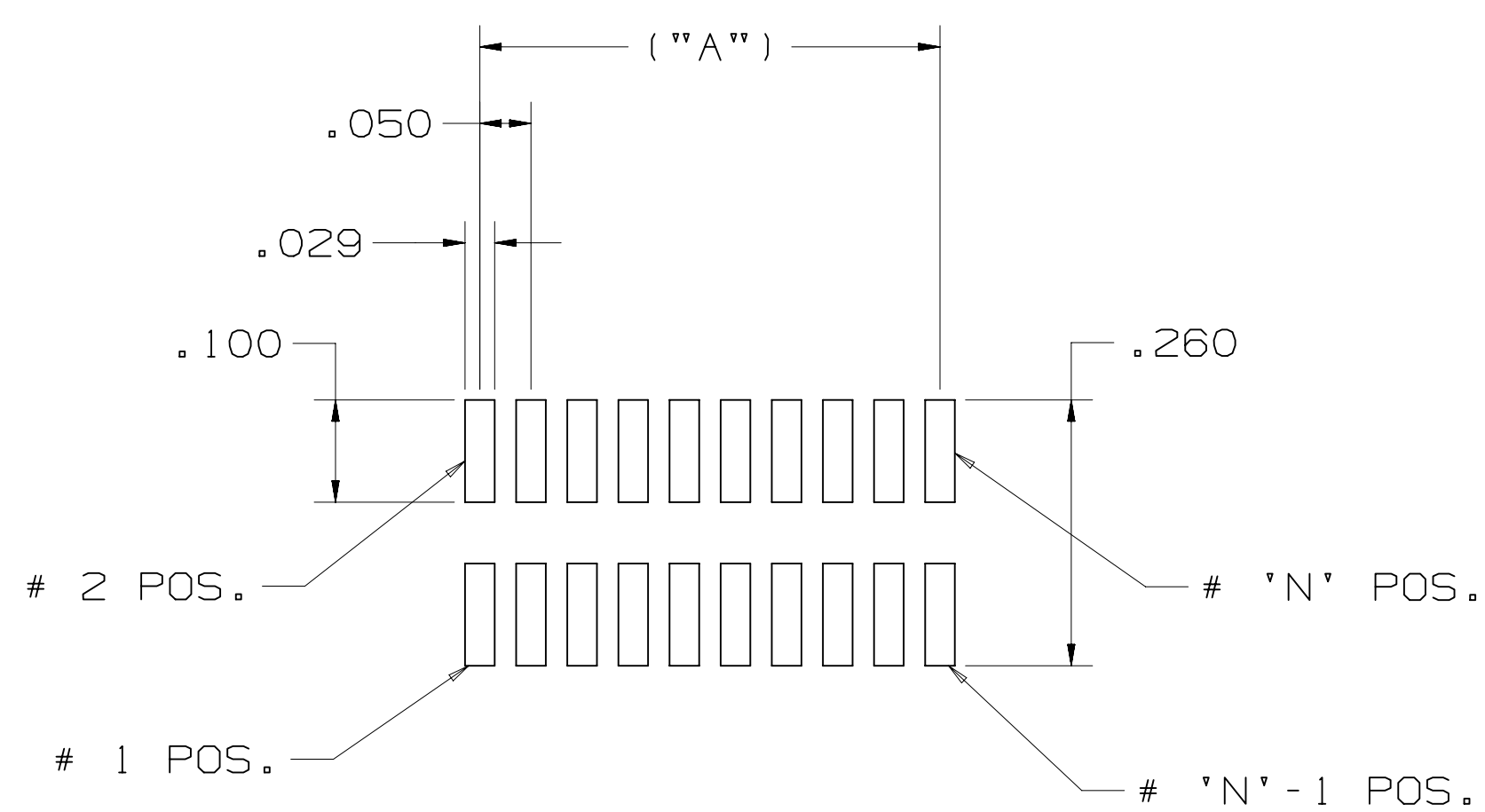
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH  
LATCH AND EJECT, 452 SERIES

TABLE 1: VERTICAL SMT

| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4             | .050    | .215    | .270    |
| 6             | .100    | .265    | .320    |
| 8             | .150    | .315    | .370    |
| 10            | .200    | .365    | .420    |
| 12            | .250    | .415    | .470    |
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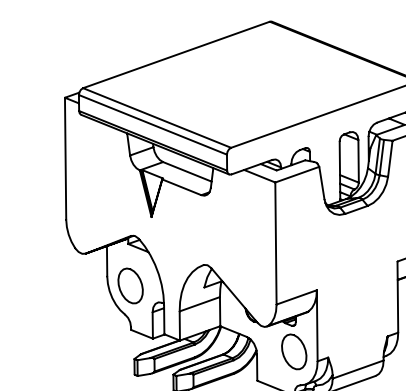
SURFACE MOUNT, VERTICAL



RECOMMENDED BOARD LAYOUT



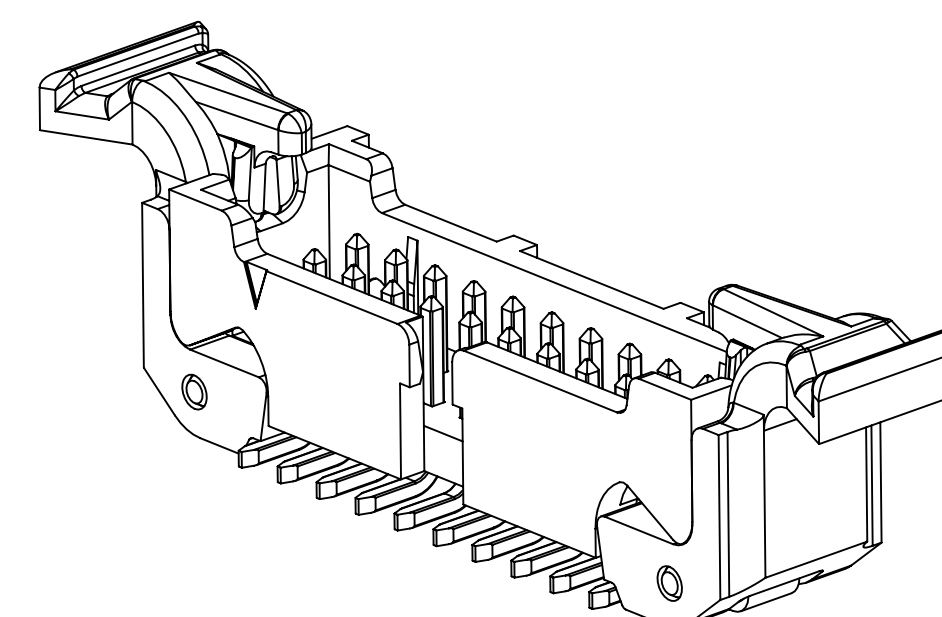
SHROUDED SMT HEADER



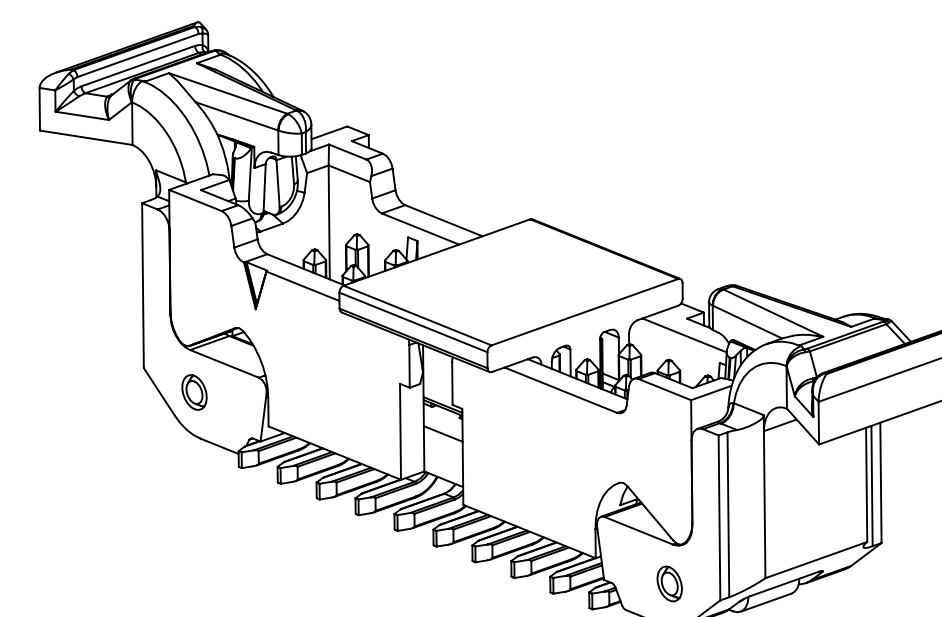
VACUUM CAP SEATED ON TOP  
EDGES OF END WALLS ON  
POSITIONS 4 AND 6



WITH VACUUM CAP



WITH LATCH/EJECT



WITH LATCH/EJECT  
AND VACUUM CAP  
VACUUM CAP IS FULLY SEATED  
ON POSITIONS 8 THRU 30

| REV | ECO   | ISSUE DATE AND DESCRIPTION                         | DRFT | CHKD |
|-----|-------|--|------|------|
| F   | 56988 | SEP 24, 2014<br>REVISE PERFORMANCE CHART           | JNC  | SN   |
| E   | 54514 | JUN 19, 2014<br>ADD UL LOGO, ADD 56MM T&R          | SJS  | SAN  |
| D   | 51884 | JAN 08, 2014<br>ADD DESIGN REF, UPDATE TITLE       | SJS  | SAN  |
| C   | 50290 | OCT 08, 2013<br>REVISE NOTE 1, 9 & OPERATING TEMP. | JNC  | SN   |
| B   | 48635 | JUL 12, 2013<br>MATCH TEXT FONTS & ADD NOTE 9      | JNC  | SN   |
| A   | 46797 | MAR 25, 2013<br>PRODUCTION RELEASE                 | JNC  | SAN  |

78-5100-2436-3  
78-5100-2396-9

DESIGN REFERENCE NEXT ASSEMBLY

| DRFT | DATE         | DRFT | DATE         |
|------|--------------|------|--------------|
| ARM  | NOV 29, 2012 | PRC  | NOV 29, 2012 |
| SAN  | NOV 29, 2012 | SAN  | NOV 29, 2012 |

DIVISION: Interconnect Solutions

SCALE: 6/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2009

MAX SURFACE ROUGHNESS

MARKED ONLY

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TITLE: BOARDMOUNT HEADER, .05 X .05 PITCH, L/E, 452 SERIES

CAGE NUMBER: D78-5100-2437-1

REV. F

78-5100-2437-1 F REVISION  
IMAGED: F.1 9/24/2014 9:06 AM UTC-05:00

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH  
LATCH AND EJECT, 452 SERIES

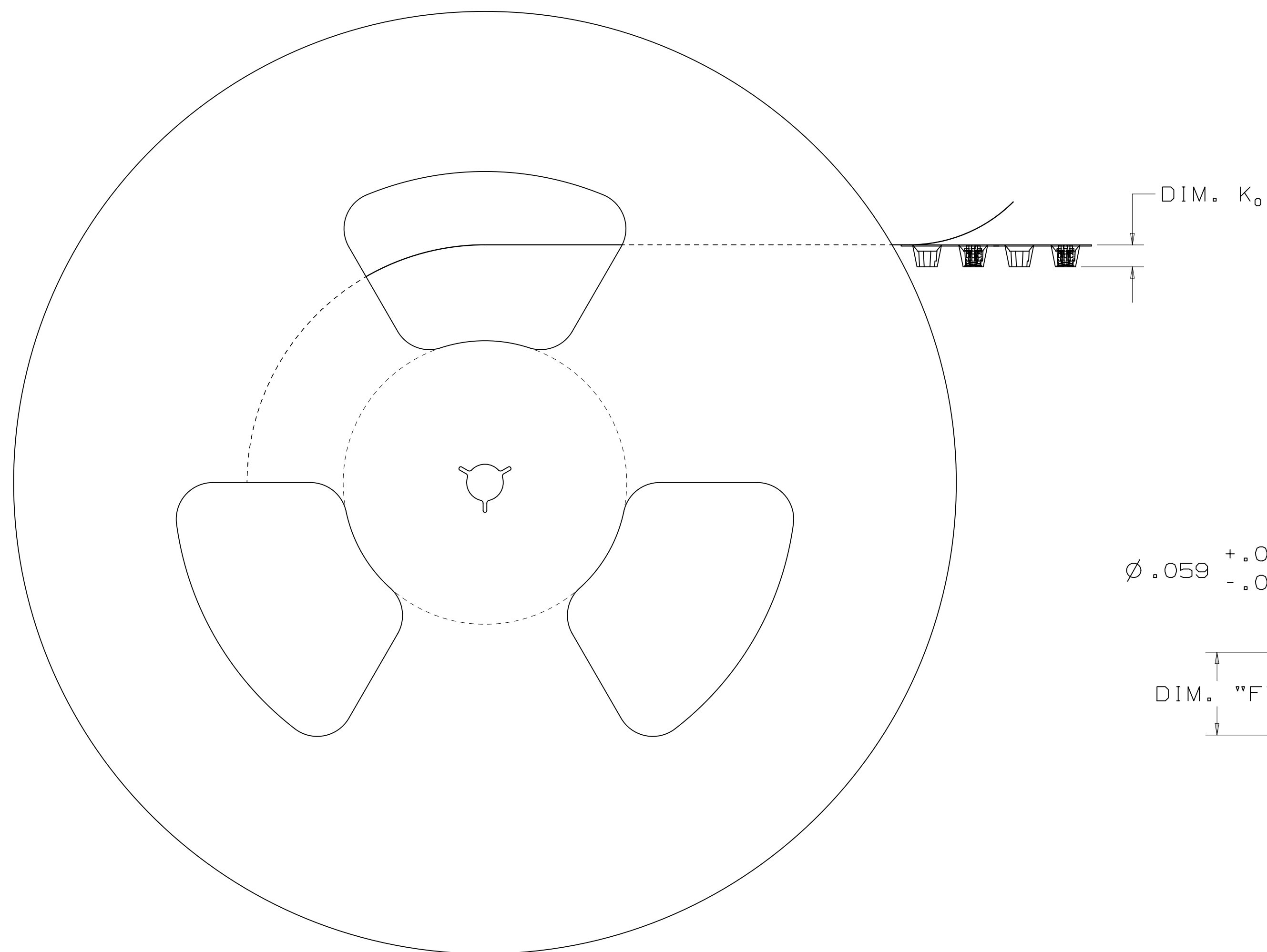
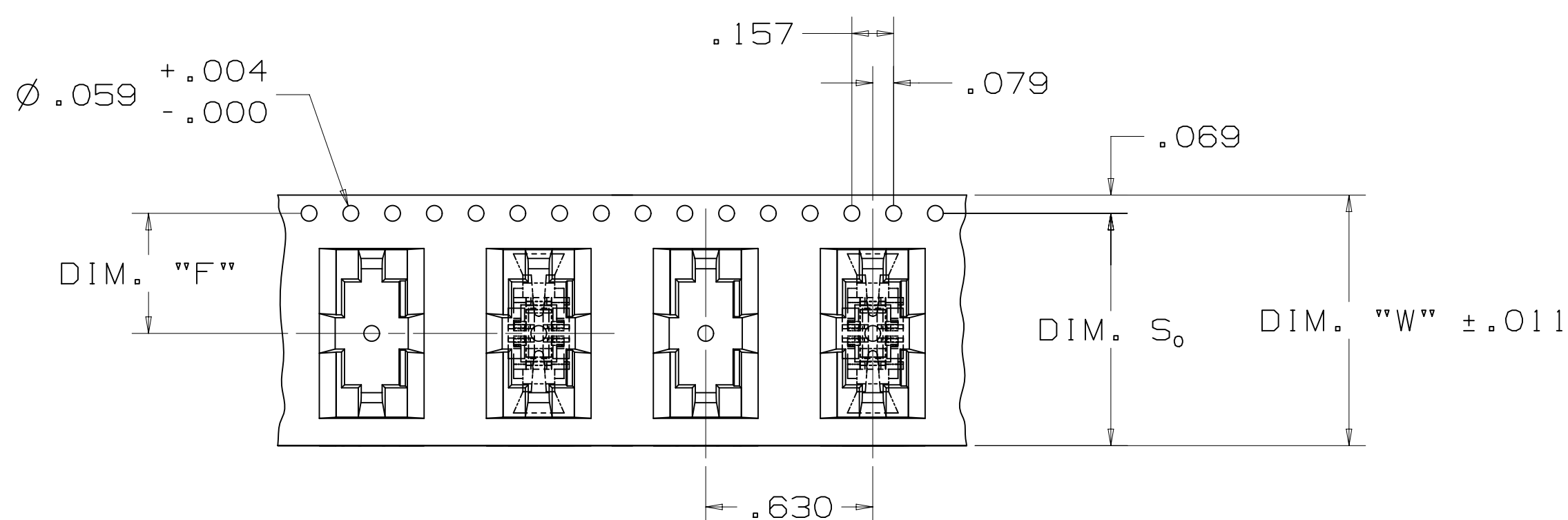


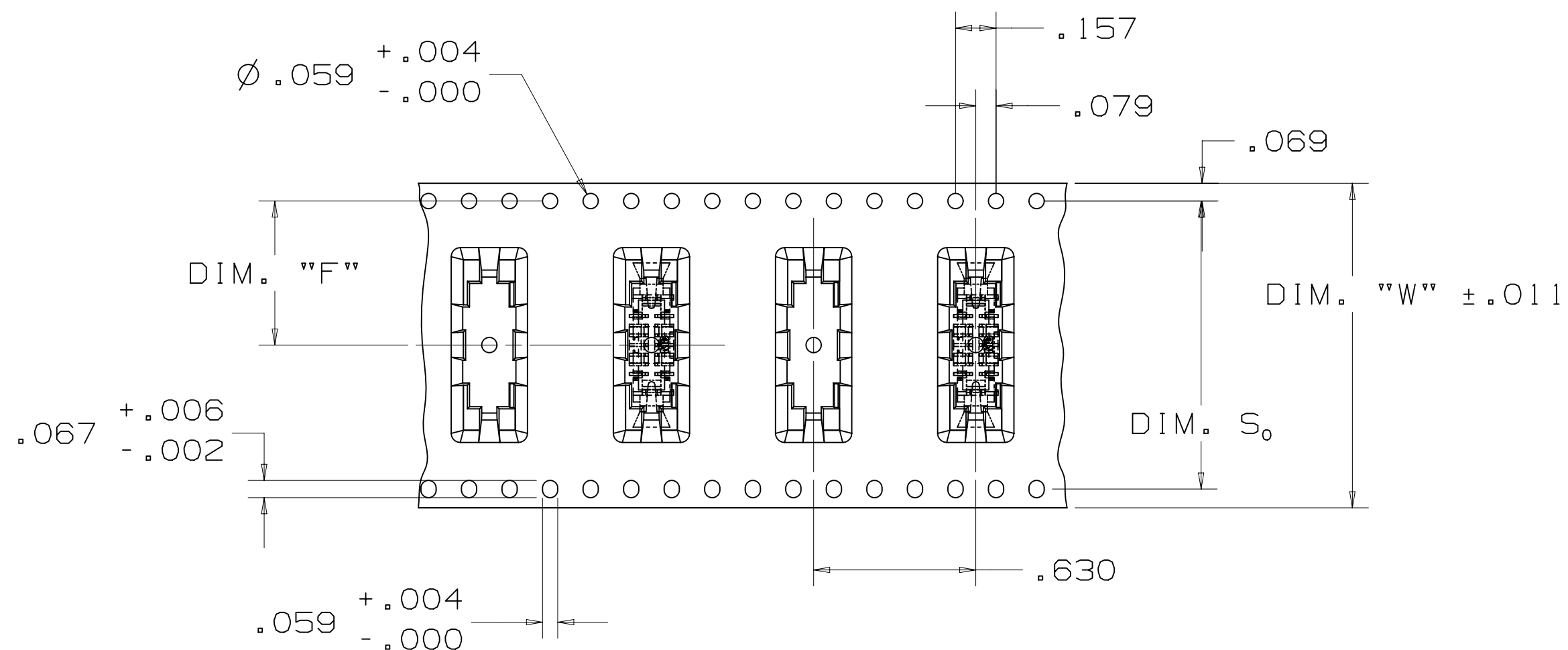
TABLE 2  
TAPE AND REEL PACKAGING FOR SURFACEMOUNT HEADERS

| POS | LATCHES | DIM. "F" | DIM. K <sub>0</sub> | DIM. S <sub>0</sub> | DIM. "W"       |
|-----|---------|----------|---------------------|---------------------|----------------|
| 4   | NO      | .453     | .263                | .876                | .945 [ 24MM ]  |
| 4   | YES     | .453     | .300                | .876                | 1.260 [ 32MM ] |
| 6   | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 6   | YES     | .559     | .300                | 1.118               | 1.260 [ 32MM ] |
| 8   | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 8   | YES     | .559     | .300                | 1.118               | 1.732 [ 44MM ] |
| 10  | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 10  | YES     | .559     | .300                | 1.118               | 1.732 [ 44MM ] |
| 12  | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 12  | YES     | .559     | .300                | 1.118               | 1.732 [ 44MM ] |
| 14  | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 14  | YES     | .795     | .300                | 1.591               | 1.732 [ 44MM ] |
| 16  | NO      | .453     | .238                | .876                | .945 [ 24MM ]  |
| 16  | YES     | .795     | .300                | 1.591               | 1.732 [ 44MM ] |
| 20  | NO      | .559     | .238                | 1.118               | 1.260 [ 32MM ] |
| 20  | YES     | .795     | .300                | 1.591               | 1.732 [ 44MM ] |
| 30  | NO      | .795     | .238                | 1.591               | 1.732 [ 44MM ] |
| 30  | YES     | .795     | .300                | 1.591               | 2.205 [ 56MM ] |

NOTE:  
LATCH EJECT HEADERS ARE PACKAGED WITH THE LATCHES  
IN AN OPEN POSITION.



24MM WIDE POCKET TAPE



32MM, 44MM AND 56MM WIDE POCKET TAPE

78-5100-2436-3  
78-5100-2396-9

|                                 |                            |
|---------------------------------|----------------------------|
| DESIGN REFERENCE                | NEXT ASSEMBLY              |
| ISSUE CODES                     | ISSUE DATE AND DESCRIPTION |
| DIVISION                        | DIVISION CODE              |
| Interconnect Solutions          | ISD                        |
| DO NOT SCALE DRAWING            | TOLERANCES EXCEPT AS NOTED |
| THIRD ANGLE PROJECTION          | INCHES                     |
| INTERPRET PER ASME Y14.5 - 2009 | MILLIMETERS                |
| MAX SURFACE ROUGHNESS           | ANGLES                     |
| MARKED ONLY                     |                            |

| REV | ECO   | ISSUE DATE AND DESCRIPTION                         | DRFT | CHKD |
|-----|-------|--|------|------|
| F   | 56988 | SEP 24, 2014<br>REVISE PERFORMANCE CHART           | JNC  | SN   |
| E   | 54514 | JUN 19, 2014<br>ADD UL LOGO, ADD 56MM T&R          | SJS  | SAN  |
| D   | 51884 | JAN 08, 2014<br>ADD DESIGN REF, UPDATE TITLE       | SJS  | SAN  |
| C   | 50290 | OCT 08, 2013<br>REVISE NOTE 1, 9 & OPERATING TEMP. | JNC  | SN   |
| B   | 48635 | JUL 12, 2013<br>MATCH TEXT FONTS & ADD NOTE 9      | JNC  | SN   |
| A   | 46797 | MAR 25, 2013<br>PRODUCTION RELEASE                 | JNC  | SAN  |

|              |      |              |              |
|--------------|------|--------------|--------------|
| DATE         | TIME | DATE         | DATE         |
| NOV 29, 2012 | PRC  | NOV 29, 2012 | NOV 29, 2012 |
| DATE         | APPR | DATE         | DATE         |
| NOV 29, 2012 | SAN  | NOV 29, 2012 | NOV 29, 2012 |

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**3M** Center St. Paul, MN 55144

TITLE  
BOARDMOUNT HEADER,  
.05 X .05 PITCH, L/E,  
452 SERIES

CAGE NUMBER  
D 78-5100-2437-1

REV. NUMBER  
F

MODEL  
SHT 4 OF 4

78-5100-2437-1  
DRAWING NUMBER  
F  
REVISION  
9:06 AM UTC-05:00  
Imaged: F.1 9/24/2014

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- 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.);

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## 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:

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

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

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

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