# Terminal Junction Systems
## MIL-T-81714 Series I Class D

### MIL-T-81714 Series I Junction Modules

QPL-approved MIL-T-81714 modules and MIL-C-39029/1 contacts are available in four standard sizes accommodating 12-26 AWG wires in both feedback and feedthru types with full a selection of bussing arrangements. The complete MIL-T-81714 Series I Terminal Junction System includes the following products.

**Feedback Modules**
**Feedthru Modules**

**Electronic Modules**

**Ground Modules**

**Single In-Line Splices**
**Dual In-Line Splices**
**Electronic Splices**

**Mounting Tracks**

### Key Features and Benefits

**Integral Socket/Bus Bar**
The patented integral socket/bus bar assembly provides superior electrical characteristics and assures mechanical integrity over a long product life. This unique design totally eliminates all solder of welded joints which could cause variation in electrical and/or mechanical performance

**Integral Contacts**
Integral female contacts and bus bar have no mechanical functions- only the electrical conductivity function and are highly conductive alloy for optimum electrical performance.

**Split Socket Design**
Split Socket Design, conforming to the mating pin diameter, provides peripheral surface wipe and contact, while utilizing the maximum mating surfaces of pin and socket.

**High Density Modules**
A recently introduced series of high density modules which conform to all dimensional and performance requirements of MIL-T-81714/17 is now available from Amphenol Pcd. The high density modules accept 21 size 22 contacts in a compact 3x7 configuration, with a wide variety of bus arrangements. The construction features one-piece screw machine contacts with a split socket design for maximum performance. Contacts are securely packaged within a polyethermide housing.

**Class D Modules System**
Amphenol Pcd was the first supplier to qualify module and track systems to high performance MIL-T-81714 Series I Class D requirements. Class D systems combine the maximum high temperature and high fluid resistance performance parameters previously divided among three module classes A,B, and C.

**Electronic Splices**
TJSE electronic modules can be supplied with a wide variety of diodes, resistors, capacitors, and fuses within the splice itself. TJSE electronic splices meet the electronical parameters of MIL-81714/24 and allow customers to incorporate system modifications into a wire bundle, avoiding changes in panles modules.

# Military Qualified, QPL-Listed

## MIL-T-81714 Series I, Class D

### Class D Feedback Modules

| Military P/N | Ampehnol Pcd P/N | Page |
|---|---|---|
| M81714/1-DA1 | TJM122701 | 36 |
| M81714/1-DB1 | TJM122702 | 36 |
| M81714/1-DB2 | TJM122703 | 36 |
| M81714/1-DB3 | TJM122704 | 36 |
| M81714/1-DC1 | TJM122705 | 36 |
| M81714/1-DC2 | TJM122706 | 36 |
| M81714/1-DC3 | TJM122710 | 36 |
| M81714/1-DC4 | TJM122712 | 36 |
| M81714/1-DD1 | TJM122707 | 36 |
| M81714/1-DD2 | TJM122711 | 36 |
| M81714/1-DE1 | TJM122708 | 36 |
| | | |
| M81714/2-DA1 | TJM120701 | 37 |
| M81714/2-DB1 | TJM120702 | 37 |
| M81714/2-DB2 | TJM120703 | 37 |
| M81714/2-DB3 | TJM120704 | 37 |
| M81714/2-DC1 | TJM120705 | 37 |
| M81714/2-DC2 | TJM120706 | 37 |
| M81714/2-DC3 | TJM120710 | 37 |
| M81714/2-DC4 | TJM120712 | 37 |
| M81714/2-DD1 | TJM120707 | 37 |
| M81714/2-DD2 | TJM120711 | 37 |
| M81714/2-DE1 | TJM120708 | 37 |
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| M81714/3-DA1 | TJM116701 | 38 |
| M81714/3-DB1 | TJM116702 | 38 |
| M81714/3-DB2 | TJM116703 | 38 |
| M81714/3-DC1 | TJM116705 | 38 |
| M81714/3-DC2 | TJM116706 | 38 |
| M81714/3-DD1 | TJM116707 | 38 |
| | | |
| M81714/4-DA1 | TJM112701 | 39 |
| M81714/4-DB1 | TJM112702 | 39 |
| M81714/4-DB2 | TJM112703 | 39 |
| M81714/4-DC1 | TJM112705 | 39 |
| M81714/4-DC2 | TJM112706 | 39 |
| M81714/4-DD1 | TJM112707 | 39 |
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| M81714/17-D30 | TJHD22700 | 40 |
| M81714/17-D31 | TJHD22701 | 40 |
| M81714/17-D32 | TJHD22702 | 40 |
| M81714/17-D33 | TJHD22703 | 40 |
| M81714/17-D34 | TJHD22704 | 40 |
| M81714/17-D35 | TJHD22705 | 40 |
| M81714/17-D36 | TJHD22706 | 40 |
| M81714/17-D37 | TJHD22707 | 40 |
| M81714/17-D38 | TJHD22708 | 40 |
| M81714/17-D39 | TJHD22709 | 40 |
| M81714/17-D40 | TJHD22710 | 40 |
| M81714/17-D42 | TJHD22712 | 40 |
| M81714/17-D43 | TJHD22713 | 40 |
| M81714/17-D44 | TJHD22714 | 40 |
| M81714/17-D45 | TJHD22715 | 40 |

### Class D Feedthru Modules

| Military P/N | Amphenol Pcd P/N | Page |
|---|---|---|
| M81714/6-DA1 | TJM222701 | 36 |
| M81714/6-DB1 | TJM222702 | 36 |
| M81714/6-DB2 | TJM222703 | 36 |
| M81714/6-DB3 | TJM222704 | 36 |
| M81714/6-DC1 | TJM222705 | 36 |
| M81714/6-DC2 | TJM222706 | 36 |
| M81714/6-DD1 | TJM222707 | 36 |
| M81714/6-DE1 | TJM222708 | 36 |
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| M81714/7-DA1 | TJM220701 | 37 |
| M81714/7-DB1 | TJM220702 | 37 |
| M81714/7-DB2 | TJM220703 | 37 |
| M81714/7-DB3 | TJM220704 | 37 |
| M81714/7-DC1 | TJM220705 | 37 |
| M81714/7-DC2 | TJM220706 | 37 |
| M81714/7-DD1 | TJM220707 | 37 |
| M81714/7-DE1 | TJM220708 | 37 |
| M81714/7-DJ1 | TJM220709 | 37 |
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| M81714/8-DA1 | TJM216701 | 38 |
| M81714/8-DB1 | TJM216702 | 38 |
| M81714/8-DB2 | TJM216703 | 38 |
| M81714/8-DC1 | TJM216705 | 38 |
| M81714/8-DC2 | TJM216706 | 38 |
| M81714/8-DD1 | TJM216707 | 38 |
| M81714/8-DG1 | TJM216708 | 38 |
| M81714/8-DH1 | TJM216709 | 38 |
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| M81714/9-DA1 | TJM212701 | 39 |
| M81714/9-DB2 | TJM212702 | 39 |
| M81714/9-DB3 | TJM212703 | 39 |
| M81714/9-DC1 | TJM212705 | 39 |
| M81714/9-DC2 | TJM212706 | 39 |
| M81714/9-DD1 | TJM212707 | 39 |
| M81714/9-DH1 | TJM212709 | 39 |

Amphenol Pcd



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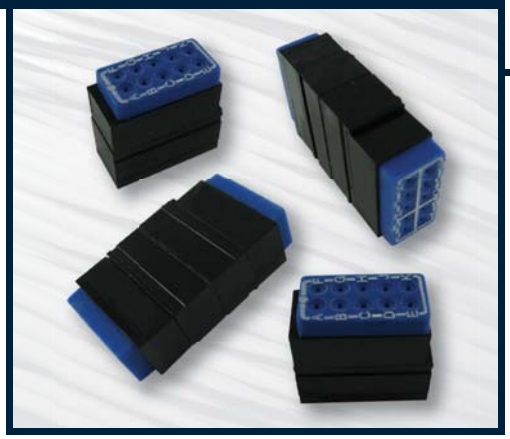
## Terminal Junction Modules

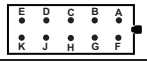
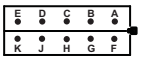
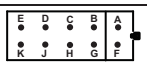
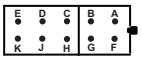
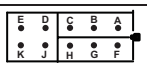
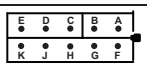
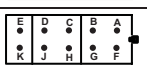
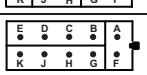
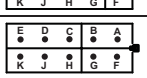
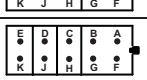
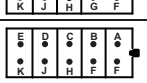
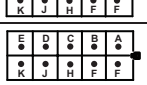


# M81714/1, /6
## Series I Size 22 Class D

### Operating Range
**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms @ 25ºC
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.
**Current Rating**
5 Amps
**Vibration & Shock:**
MIL-T-81714 Paragraph 3.5.5 and 3.5.8

### Materials
**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Contact Retainers:**
Stainless Steel
**Internal Socket Contacts:**
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204
**Accepts Multiple Wire Sizes:**
Size 22, 24, 26 AWG

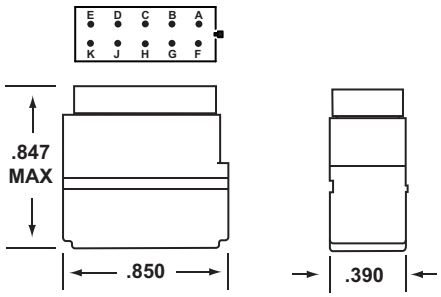
## Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback | | Feedthru | | Contact | | |
|---|---|---|---|---|---|---|---|
| | Military P/N | APCD P/N | Military P/N | APCD P/N | QTY* | Size[1] | P/N M39029 |
|  | M81714/1-DA1 | TJM122701 | M81714/6-DA1 | TJM222701 | 10 | 16/22 | /1-100 |
|  | M81714/1-DB1 | TJM122702 | M81714/6-DB1 | TJM222702 | 10 | 16/22 | /1-100 |
|  | M81714/1-DB2 | TJM122703 | M81714/6-DB2 | TJM222703 | 10 | 16/22 | /1-100 |
|  | M81714/1-DB3 | TJM122704 | M81714/6-DB3 | TJM222704 | 10 | 16/22 | /1-100 |
|  | M81714/1-DC1 | TJM122705 | M81714/6-DC1 | TJM222705 | 10 | 16/22 | /1-100 |
|  | M81714/1-DC2 | TJM122706 | M81714/6-DC2 | TJM222706 | 10 | 16/22 | /1-100 |
|  | M81714/1-DC3 | TJM122710 | | | 10 | 16/22 | /1-100 |
|  | M81714/1-DC4 | TJM122712 | | | 10 | 16/22 | /1-100 |
|  | M81714/1-DD1 | TJM122707 | M81714/6-DD1 | TJM222707 | 10 | 16/22 | /1-100 |
|  | M81714/1-DD2 | TJM122711 | | | 10 | 16/22 | /1-100 |
|  | M81714/1-DE1 | TJM122708 | M81714/6-DE1 | TJM222708 | 10 | 16/22 | /1-100 |
|  | | | M81714/6-DJ1 | TJM222709 | 10 | 16/22 | /1-100 |

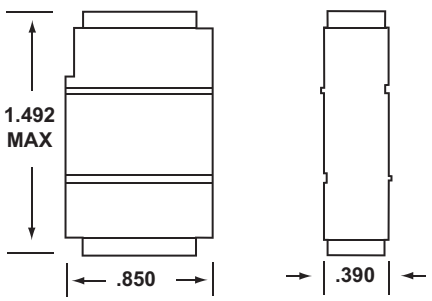
* [1] *Contact quanity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug. Mating Pin / Wire Barrel*

## Terminal Junction Module Dimensions

### Feedback Dimensions




### Feedthru Dimensions




Amphenol Pcd

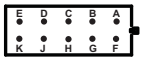
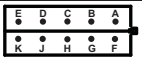
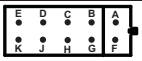
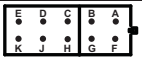
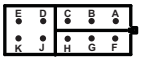
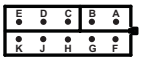
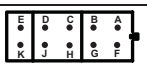
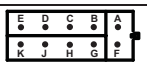
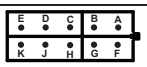
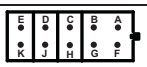
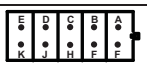
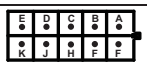
# M81714/2, /7
## Series I Size 20 Class D

## Terminal Junction Modules

### Operating Range
**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms @ 25ºC
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.
**Current Rating**
7.5 Amps
**Vibration & Shock:**
MIL-T-81714 Paragraph
3.5.5 and 3.5.8

### Materials
**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Contact Retainers:**
Stainless steel
**Socket Contacts:**
Copper Alloy, Hard Gold Plated in
Accordance with MIL-G-45204
**Accepts Multiple Wire Sizes:**
Size 20, 22, 24 AWG

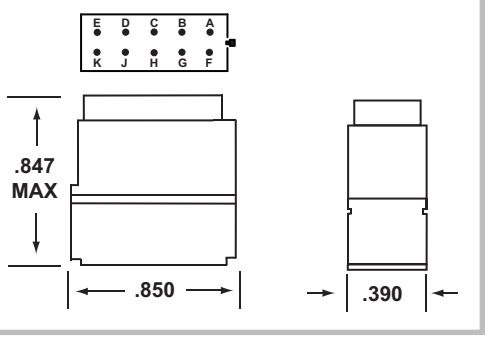
## Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback | | Feedthru | | Contact | | |
|---|---|---|---|---|---|---|---|
| | Military P/N | APCD P/N | Military P/N | APCD P/N | QTY* | Size[1] | P/N M39029 |
|  | M81714/2-DA1 | TJM120701 | M81714/7-DA1 | TJM220701 | 10 | 16/20 | /1-101 |
|  | M81714/2-DB1 | TJM120702 | M81714/7-DB1 | TJM220702 | 10 | 16/20 | /1-101 |
|  | M81714/2-DB2 | TJM120703 | M81714/7-DB2 | TJM220703 | 10 | 16/20 | /1-101 |
|  | M81714/2-DB3 | TJM120704 | M81714/7-DB3 | TJM220704 | 10 | 16/20 | /1-101 |
|  | M81714/2-DC1 | TJM120705 | M81714/7-DC1 | TJM220705 | 10 | 16/20 | /1-101 |
|  | M81714/2-DC2 | TJM120706 | M81714/7-DC2 | TJM220706 | 10 | 16/20 | /1-101 |
|  | M81714/2-DC3 | TJM120710 | | | 10 | 16/20 | /1-101 |
|  | M81714/2-DC4 | TJM120712 | | | 10 | 16/20 | /1-101 |
|  | M81714/2-DD1 | TJM120707 | M81714/7-DD1 | TJM220707 | 10 | 16/20 | /1-101 |
|  | M81714/2-DD2 | TJM120711 | | | 10 | 16/20 | /1-101 |
|  | M81714/2-DE1 | TJM120708 | M81714/7-DE1 | TJM220708 | 10 | 16/20 | /1-101 |
|  | | | M81714/7-DJ1 | TJM220709 | 10 | 16/20 | /1-101 |

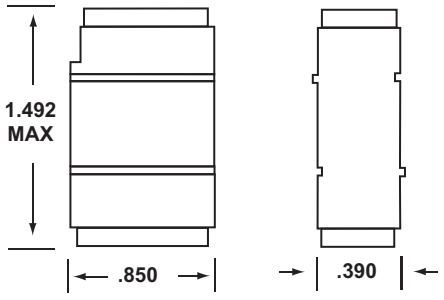
* Contact quanity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.
1 Mating Pin / Wire Barrel

## Terminal Junction Module Dimensions

### Feedback Dimensions




### Feedthru Dimensions



Amphenol Pcd



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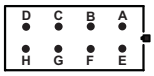
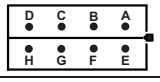
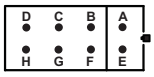
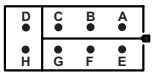
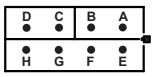
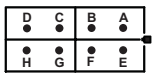
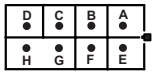
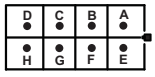
## Terminal Junction Modules

# M81714/3, /8
# Series I Size 16 Class D

### Operating Range
**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms @ 25ºC
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.
**Current Rating**
13 Amps
**Vibration & Shock:**
MIL-T-81714 Paragraph
3.5.5 and 3.5.8

### Materials
**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Contact Retainers:**
Stainless Steel
**Socket Contacts:**
Copper Alloy, Hard Gold Plated in
Accordance with MIL-G-45204
**Accepts Multiple Wire Sizes:**
Size 16, 18, 20 AWG

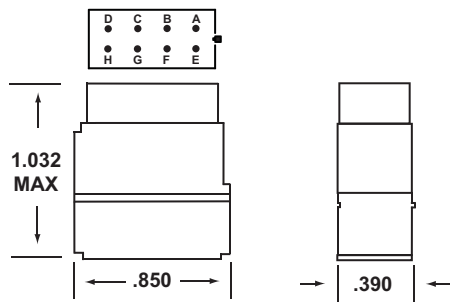
## Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback | | Feedthru | | Contact | | |
|---|---|---|---|---|---|---|---|
| | Military P/N | APCD P/N | Military P/N | APCD P/N | QTY* | Size[1] | P/N M39029 |
|  | M81714/3-DA1 | TJM116701 | M81714/8-DA1 | TJM216701 | 8 | 14/16 | /1-102 |
|  | M81714/3-DB1 | TJM116702 | M81714/8-DB1 | TJM216702 | 8 | 14/16 | /1-102 |
|  | M81714/3-DB2 | TJM116703 | M81714/8-DB2 | TJM216703 | 8 | 14/16 | /1-102 |
|  | M81714/3-DC1 | TJM116705 | M81714/8-DC1 | TJM216705 | 8 | 14/16 | /1-102 |
|  | M81714/3-DC2 | TJM116706 | M81714/8-DC2 | TJM216706 | 8 | 14/16 | /1-102 |
|  | M81714/3-DD1 | TJM116707 | M81714/8-DD1 | TJM216707 | 8 | 14/16 | /1-102 |
|  | | | M81714/8-DG1 | TJM216708 | 8 | 14/16 | /1-102 |
|  | | | M81714/8-DH1 | TJM216709 | 8 | 14/16 | /1-102 |

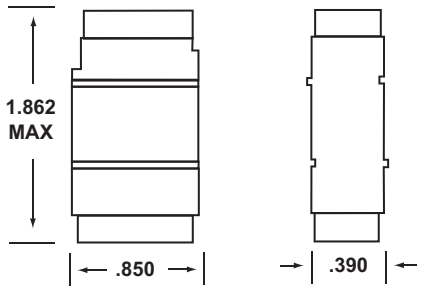
*Contact quanity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.
[1] Mating Pin / Wire Barrel

## Terminal Junction Module Dimensions

### Feedback Dimensions




### Feedthru Dimensions



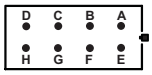
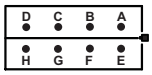
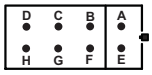
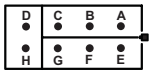
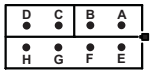
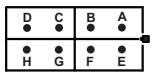
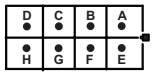
# M81714/4, /9
## Series I Size 12 Class D

### Terminal Junction Modules

### Operating Range
**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms @ 25ºC
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.
**Current Rating**
23 Amps
**Vibration & Shock:**
MIL-T-81714 Paragraph 3.5.5 and 3.5.8

### Materials
**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Contact Retainers:**
Stainless steel
**Internal Socket Contacts:**
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204
**Accepts Multiple Wire Sizes:**
Size 12, 14 AWG

## Terminal Junction Modules

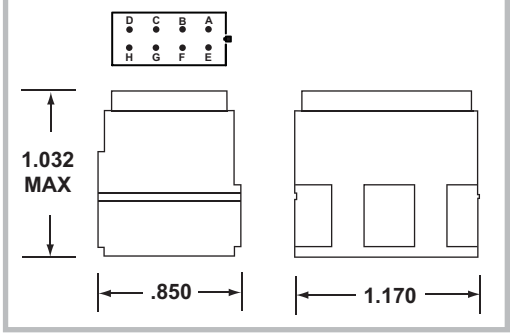
| Bussing Configurations | Feedback | | Feedthru | | Contact | | |
|---|---|---|---|---|---|---|---|
| | Military P/N | APCD P/N | Military P/N | APCD P/N | QTY* | Size[1] | P/N M39029 |
|  | M81714/4-DA1 | TJM112701 | M81714/9-DA1 | TJM212701 | 8 | 12/12 | /1-103 |
|  | M81714/4-DB1 | TJM112702 | M81714/9-DB1 | TJM212702 | 8 | 12/12 | /1-103 |
|  | M81714/4-DB2 | TJM112703 | M81714/9-DB2 | TJM212703 | 8 | 12/12 | /1-103 |
|  | M81714/4-DC1 | TJM112705 | M/81714/9-DC1 | TJM212705 | 8 | 12/12 | /1-103 |
|  | M81714/4-DC2 | TJM112706 | M81714/9-DC2 | TJM212706 | 8 | 12/12 | /1-103 |
|  | M81714/4-DD1 | TJM112707 | M81714/9-DD1 | TJM212707 | 8 | 12/12 | /1-103 |
|  | | | M81714/9-DH1 | TJM212709 | 8 | 12/12 | /1-103 |

*Contact quanity for feedthru is double feedback. Quantity figure denotes number os contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.

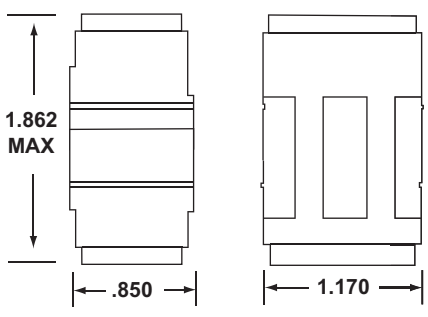
[1]Mating Pin / Wire Barrel

## Terminal Junction Module Dimensions

### Feedback Dimensions




### Feedthru Dimensions



Amphenol Pcd

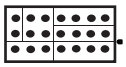
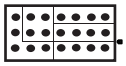
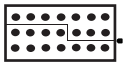
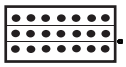
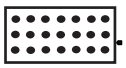
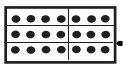
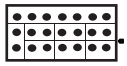
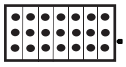
## Terminal Junction Modules

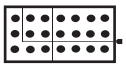
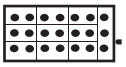
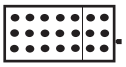
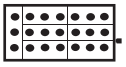
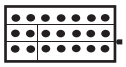
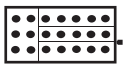
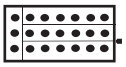
# M81714/17 High Density Modules
## Series I Size 22D Class D

### Operating Range
**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms @ 25ºC
**Dielectric Withstanding Voltage:**
1000 VRMS at Sea Level
200 VRMS at 110,000 ft.
**Current Rating**
5 Amps
**Vibration & Shock:**
MIL-T-81714 Paragraph
3.5.5 and 3.5.8

### Materials
**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Contact Retainers:**
Stainless Steel
**Internal Socket Contacts:**
Copper Alloy, Hard Gold Plated in
Accordance with MIL-G-45204
**Accepts Multiple Wire Sizes:**
Size 22, 26 AWG

## Amphenol Pcd Terminal Junction Modules

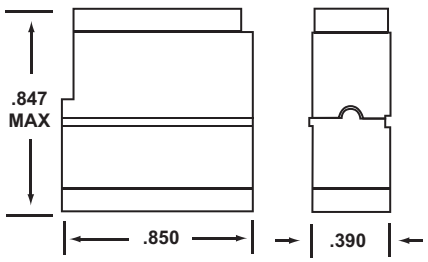
| Bussing Configurations | Feedback | |
|---|---|---|
| | Military P/N | APCD P/N |
|  | M81714/17-D30 | TJHD22700 |
|  | M81714/17-D31 | TJHD22701 |
|  | M81714/17-D32 | TJHD22702 |
|  | M81714/17-D33 | TJHD22703 |
|  | M81714/17-D34 | TJHD22704 |
|  | M81714/17-D35 | TJHD22705 |
|  | M81714/17-D36 | TJHD22706 |
|  | M81714/17-D37 | TJHD22707 |

| Bussing Configurations | Feedback | |
|---|---|---|
| | Military P/N | APCD P/N |
|  | M81714/17-D38 | TJHD22708 |
|  | M81714/17-D39 | TJHD22709 |
|  | M81714/17-D40 | TJHD22710 |
|  | M81714/17-D42 | TJHD22712 |
|  | M81714/17-D43 | TJHD22713 |
|  | M81714/17-D44 | TJHD22714 |
|  | M81714/17-D45 | TJHD22715 |

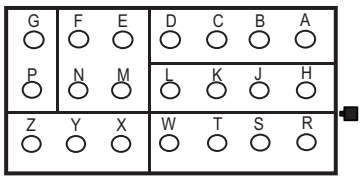
*Contacts Supplied: M39029/1-507 Qty 22*

## Terminal Junction Module Dimensions

### Feedback Dimensions




### Bussing Configuration




Contacts Supplied: M39029/1-507
Quantity Supplied: 22

Amphenol Pcd



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# M81714/27 Ground Stud Modules

## Series II Size 22, 20, 16, 12, Class D

### Terminal Junction Modules

### Operating Range

**Temperature:**
-65ºC to 200ºC
**Current Rating**
5 Amps (Size 22)
7.5 Amps (Size 20)
13 Amps (Size 16)
23 Amps (Size 12)
**Vibration & Shock:**
MIL-T-81714 Paragraph 3.5.5 and 3.5.8

### Materials

**Module Body:**
Polyetherimide per ASTM-D5205
**Grommet:**
Silicone Blend Elastomer per A-A-59588
**Mounting Stud:**
Copper Alloy, Gold Plated per SAE-AMS-2422.
**Contact Retainers:**
Stainless Steel
**Internal Socket Contacts:**
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204

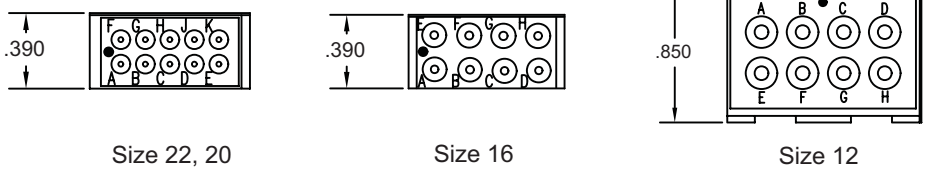
## Terminal Grounding Modules Part Numbers

| Part Numbers | | Contact | | |
|---|---|---|---|---|
| Military Equivilent P/N | APCD P/N | QTY* | Size[1] | P/N M39029 |
| M81714/27-22 | TJG122701 | 10 | 16/22 | /1-100 |
| M81714/27-20 | TJG120701 | 10 | 16/20 | /1-101 |
| M81714/27-16 | TJG116701 | 8 | 14/16 | /1-102 |
| M81714/27-12 | TJG112701 | 8 | 12/12 | /1-103 |

* *Mating End/ Wire Barrel*
1 *Quantity figure denotes number of contacts accommodated by module. Modules are supplied with two additional spare contacts and sealing plugs*

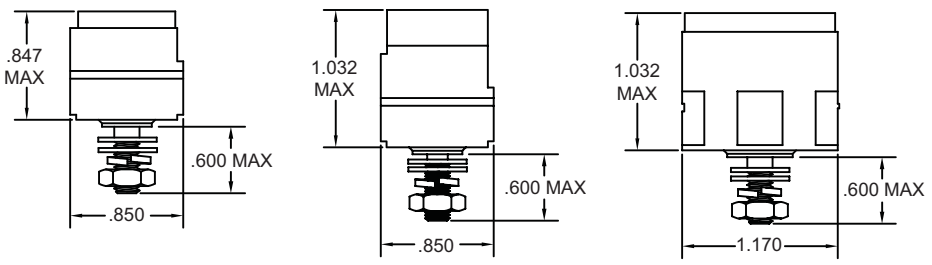
## Terminal Junction Module Dimensions

### Top View




Size 22, 20 | Size 16 | Size 12

### Side View




Size 22, 20 | Size 16 | Size 12

## Product Description

Multi-contact grounding/bus connection modules are provided with an integral threaded grounding stud. The stud is electrically and mechanically common to all internal contacts of the module.

Electrical connection and mechanical mounting are achieved through a single #10-32 stud. The modules are dimensional identical to the equivalent MIL-T-81714/27 grounding stud modules.

Direct mounting to a ground plane or ground wire with the terminal lug creates a convenient multi-wire sealed grounding device.

Direct attachment to a bus bar transforms the device into a bus connection module for multi-contact power distribution, sensing or metering.

All modules are furnished with complete mounting hardware.

Amphenol Pcd



www.amphenolpcd.com Milaero@amphenolpcd.com 1-978-624-3400 72 Cherry Hill Drive Beverly, MA 01915

# Electronic Terminal Junction Modules

## MIL-T-81714/26 Compatible Class D

### Operating Range

**Temperature:**
-65ºC to 200ºC*
**Insulation Resistance:**
5000 Megaohms Min. @ 25ºC*
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.*
**Vibration & Shock:**
Per MIL-T-81714
Paragraph 3.5.5 & 3.5.9*
**Current Rating:**
7.5 amps*

### Materials

**Module Body:**
Polyethermide per ASTM-D-5205
**Grommet:**
Silicone Rubber per A-A-59588
**Contact Retainers:**
Stainless Steel
**Internal Contact:**
Copper Alloy, Gold Finish

** May vary due to internal electronic component*

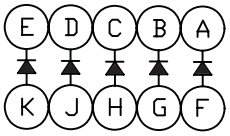
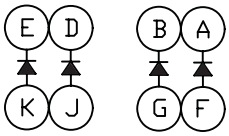
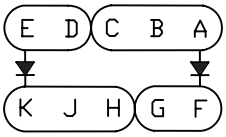
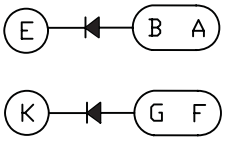
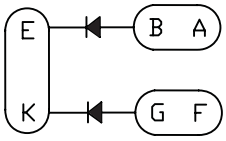
### Product Description

Electronic Terminal Junction modules meet all dimensional and performance requirements of M81714/26 and are specifically developed for electronic component packaging. Available For size 20 and 22 contacts, these modules function as highly efficient and reliable Electronic component packages. They improve system efficiency and density by permitting various electronic components such as diodes, resistors, fuses, and capacitors, which usaully take up valuable space elsewhere in the system, to be securely packaged within the module housing.

Amphenol Pcd electronic modules offer significant design, material and construction improvements over competitive modules. Hand soldering operations have been completely eliminated. Electronic components are encapsulated in a semi-rigid elastomer that provides electrical spacing and insulation as well as shock and vibration protection.

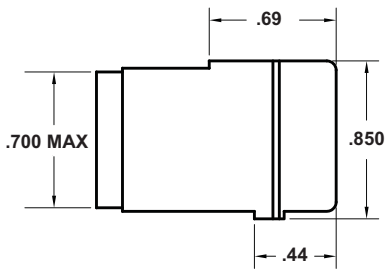
Typical commercially available diode configurations are indicated on this page. A broad variety of additional configurations are available, and modules can be customized to meet specific customerdesigns. Please contact Amphenol Pcd to review requirements and discuss available options.

### Amphenol Pcd Terminal Junction Module

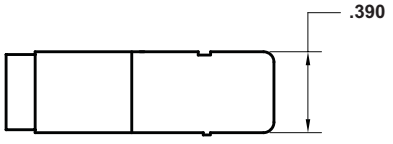
| Circuit Diagram | APCD P/N | Diode P/N | Quantity |
|---|---|---|---|
|  | TJE120810 | JANTX1N5552 | 5 |
|  | TJE120811 | JANTX1N5552 | 4 |
|  | TJE120815 | 1N4005 | 2 |
|  | TJE120998 | BYW56 | 2 |
|  | TJE120999 | BYW56 | 2 |

### Terminal Junction Module Dimensions

**Top View**




**Side View**

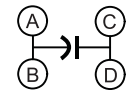
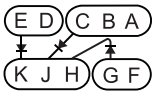
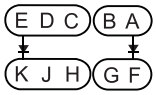
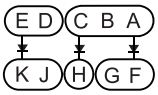
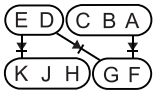
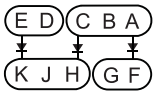
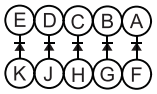
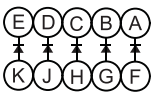
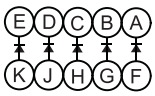
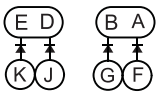
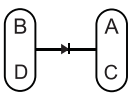
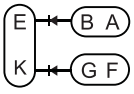
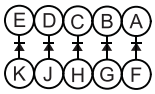
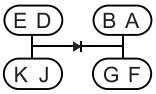


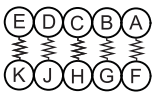
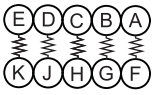
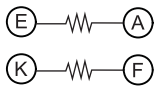
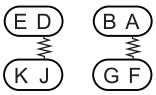
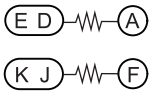
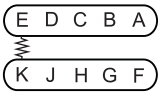
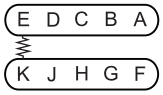
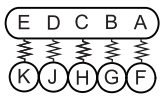
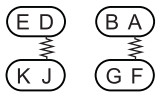
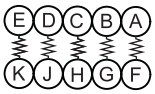
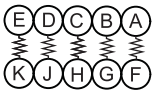
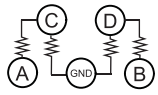
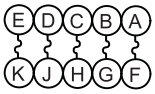
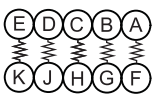
# Electronic Terminal Junction Modules

## MIL-T-81714/26 Compatible Class D

Amphenol Pcd's Electronic Terminal Junction Modules are available with a variety of components and in a wide range of configurations. Components available include but are not limited to diodes, resistors, fuses, capacitors, thyristors, and inductors, and are also available with multiple components within one module. The following are currently available Electronic Terminal Junction Modules, although there are new configurations produced regularly and customized components are also available.

## Amphenol Pcd Electronic Terminal Junction Modules

| Circuit Diagram | APCD P/N | Part | Part P/N | Quantity |
|---|---|---|---|---|
|  | TJE120514 | Capacitor | 620pF | 1 |
|  | TJE120816 | Diode | IN4003 | 3 |
|  | TJE120817 | Diode | IN4003 | 2 |
|  | TJE120818 | Diode | IN4003 | 3 |
|  | TJE120819 | Diode | IN4003 | 3 |
|  | TJE120820 | Diode | IN4003 | 3 |
|  | TJE120822 | Diode | IN4007 | 5 |
|  | TJE120824 | Diode | JANTX1N5618 | 5 |
|  | TJE120826 | Diode | IN4006 | 2 |
|  | TJE120827 | Diode | JANTX1N5552 | 2 |
|  | TJE120828 | Diode | JANTX1N5618 | 2 |
|  | TJE120829 | Diode | 1N5618 | 2 |
|  | TJE120831 | Diode | 1N5618 | 2 |
|  | TJE120833 | Diode | 1N5418 | 2 |

| Circuit Diagram | APCD P/N | Part | Part P/N | Quantity |
|---|---|---|---|---|
|  | TJE120900 | Resistor | 10 K Ω,1/8 W | 5 |
|  | TJE120902 | Resistor | 150K Ω,1/8 W | 5 |
|  | TJE120903 | Resistor | 33 Ω,1/4 W | 2 |
|  | TJE120904 | Resistor | 1K Ω,1/8 W | 2 |
|  | TJE120905 | Resistor | 1K Ω,1/2 W | 2 |
|  | TJE120906 | Resistor | 150 Ω,1/2 W | 1 |
|  | TJE120907 | Resistor | 180 Ω,1/2 W | 1 |
|  | TJE120908 | Resistor | Various Ω,1/2 W | 5 |
|  | TJE120920 | Resistor | 54K,6K Ω,1/2W | 2 |
|  | TJE120921 | Resistor | 500K Ω,1 W | 5 |
|  | TJE120922 | Resistor | Various Ω,1/2 W | 5 |
|  | TJE120924 | Resistor | 1K Ω,1/4 W | 4 |
|  | TJE120927 | Fuse | 1 AMP | 5 |
|  | TJE120928 | Resistor | 1.3K Ω,1/2 W | 5 |

Amphenol Pcd

# Terminal Junction Splices

## Single/ Dual/ Diode M81714/11, /12,/24 Series I

### Operating Range

**Temperature:**
-65ºC to 200ºC
**Insulation Resistance:**
5000 Megaohms Min.
**Dielectric Withstanding Voltage:**
1500 VRMS at Sea Level
200 VRMS at 100,000 ft.
**Vibration & Shock:**
Per AS-81714
Paragraph 3.5.5 & 3.5.8

### Materials

**Insulator Body:**
Polyethermide per ASTM-D-5205
**Grommet:**
Silicone Rubber per A-A-59588
**Internal Contact:**
Copper Alloy, Gold Finish
Accordance with MIL-G-45204

### Product Description

Single and Dual Splices and Electronic Splices are designed to provide a quick and efficient solution to customer wiring requirements.

Single and Dual Wire Splices meet MIL-T-81714/11 &12 requirements and are highly resistant to temperature and fluids.

TJSE electronic modules can be supplied with a wide variety of diodes, resistors, capacitors, and fuses within the splice itself. TJSE electronic splices meet the electronic parameters of MIL-81714/24 and allow customers to incorporate system modifications into a wire bundle, avoiding changes in panels or boards.

Typical examples are represented to the right, but customer specific designs are welcomed, and an extensive list of existing splices are available on the next page.

### Single Wire Splices

| | Contacts | | Part Numbers | | |
|---|---|---|---|---|---|
| | Military P/N | APCD P/N | Quantity | Size* | Part No. |
| | M81714/11-22D | TJS322700 | 2 | 16/22 | M39029/1-100 |
| | M81714/11-20D | TJS320700 | 2 | 16/20 | M39029/1-101 |
| | M81714/11-12D | TJS316700 | 2 | 14/16 | M39029/1-102 |
| | M81714/11-16D | TJS312700 | 2 | 12/12 | M39029/1-103 |

### Dual Wire Splices

| Bussing Type | Part Numbers | | Contacts | | | Diameter | |
|---|---|---|---|---|---|---|---|
| | MIL P/N 81714 | APCD P/N | Quantity | Size* | P/N M39029 | A | B |
| | /12-22D-1 | TJS322701 | 4 | 16/22 | /1-100 | .400 | .275 |
| | /12-20D-1 | TJS320701 | 4 | 16/20 | /1-101 | .400 | .275 |
| | /12-16D-1 | TJS316701 | 4 | 14/16 | /1-102 | .500 | .300 |
| | /12-22D-2 | TJS322702 | 4 | 16/22 | /1-100 | .400 | .275 |
| | /12-20D-2 | TJS320702 | 4 | 16/20 | /1-101 | .400 | .275 |
| | /12-16D-2 | TJS316702 | 4 | 14/16 | /1-102 | .500 | .300 |

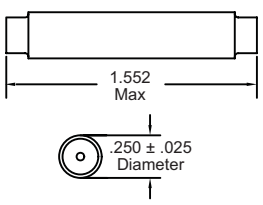
### Electronic Splices

| Circuit Type | Part Numbers | Diode | | Contacts | | |
|---|---|---|---|---|---|---|
| | APCD P/N | Diode P/N | Quantity | Size* | Quantity | P/N M39029 |
| | TJSE22707 | JANTX1N5622 | 1 | 16/22 | 4 | 1-100 |
| | TJSE20705 | JANTX1N5622 | 1 | 16/20 | 4 | 1-101 |
| | TJSE22709 | JANTX1N5622 | 2 | 16/22 | 4 | 1-100 |
| | TJSE20705 | JANTX1N5622 | 2 | 16/20 | 4 | 1-101 |

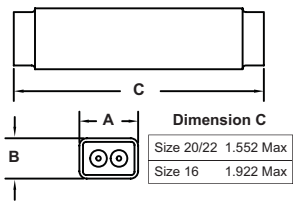
**Mating Pin Wire Barrrel*

### Relay Socket Dimensions

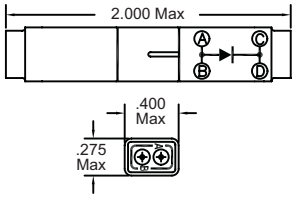
**Single Splice**




**Double Splice**




**Electronic Splice**



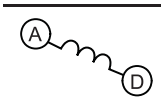
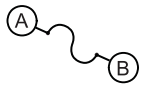
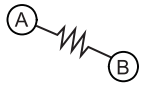
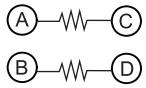
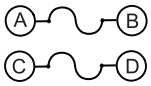
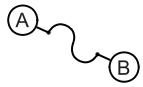
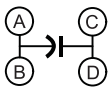
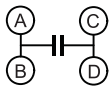
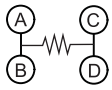
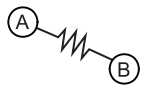
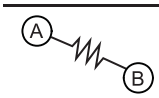
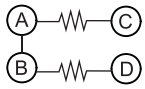
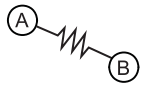
# Electronic Terminal Junction Splices

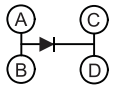
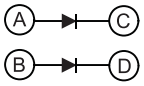
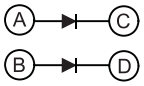
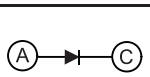
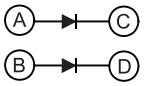
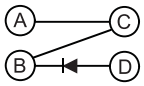
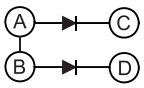
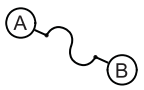
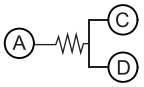
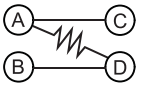
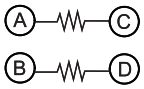
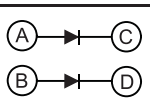
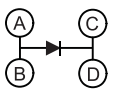
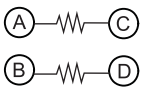
## MIL-T-81714/24 Compatible Class D

**Terminal Junction Modules**

Amphenol Pcd's Electronic Terminal Junction Splices are available with a variety of components and in a wide range of configurations. Components available include but are not limited to diodes, resistors, fuses, capacitors, thyristors, and inductors, and are also available with multiple components within one module. The following are currently available Electronic Terminal Junction Splices, although there are new configurations produced regularly and customized components are also available.

## Amphenol Pcd Terminal Junction Splices

| Circuit Diagram | APCD P/N | Part | Part P/N | Quantity |
|---|---|---|---|---|
|  | TJSE20501 | Inductor | 1 100µH | 1 |
|  | TJSE20503 | Fuse | 5 AMP 125V | 1 |
|  | TJSE20505 | Resistor | RW81 38Ω 1W | 1 |
|  | TJSE20506 | Resistor | 120 Ω 1/4W | 2 |
|  | TJSE20509 | Diode | 5 Amp | 2 |
|  | TJSE20510 | Diode | 1 Amp 125V | 1 |
|  | TJSE20513 | Capacitor | 620pF | 1 |
|  | TJSE20520 | Capacitor | 390pF | 5 |
|  | TJSE20523 | Resistor | 15KΩ 1/4W | 1 |
|  | TJSE20525 | Resistor | 10K Ω 1/4W | 1 |
| | TJSE20526 | Resistor | 910 Ω 1/4W | 1 |
|  | TJSE20553 | Resistor | 1KΩ 1/2W | 1 |
|  | TJSE20554 | Resistor | 18KΩ 1/2W | 2 |
|  | TJSE20555 | Resistor | 18KΩ 1/2W | 1 |

| Circuit Diagram | APCD P/N | Part | Part P/N | Quantity |
|---|---|---|---|---|
|  | TJSE20599 | Diode | JANTX1N5554 | 1 |
|  | TJSE20602 | Diode | JANTX1N5618 | 2 |
|  | TJSE20703 | Diode | 1N5819 | 2 |
|  | TJSE20705 | Diode | JANTX1N5622 | 1 |
|  | TJSE20706 | Diode | JANTX1N5622 | 2 |
|  | TJSE20710 | Diode | 1N5622 | 1 |
|  | TJSE20711 | Diode | 1N4006 | 2 |
|  | TJSE22503 | Fuse | 5 AMP 125V | 1 |
|  | TJSE22514 | Resistor | 10K Ω,1/4 W | 1 |
|  | TJSE22517 | Resistor | 120 Ω,1 W | 1 |
|  | TJSE22523 | Resistor | 75K Ω,1/2 W | 2 |
|  | TJSE22707 | Diode | JANTX1N5622 | 2 |
|  | TJSE20599 | Diode | 1N5622 | 1 |
|  | TJSE20599 | Resistor | 78.7 Ω,1/4 W | 2 |

Amphenol Pcd



www.amphenolpcd.com Milaero@amphenolpcd.com 1-978-624-3400 72 Cherry Hill Drive Beverly, MA 01915

# M81714/5, /10, /16 Series I

## Terminal Junction Module Mounting Tracks

### Operating Range

**Temperature:**
-65º to 200ºC
**Corrosion:**
No Exposure of Base Metal
After 48 Hours of Salt Spray
**Magnetic Permeability:**
2.0 MU Max.
**Vibration and Shock:**
Per MIL-T-81714 Paragraph
3.5.5 and 3.5.8
**Materials**
**Rail:**
Aluminum Alloy, Black Anodized
Finish per MIL-A-8625
**Locking Clamp Screw:**
Corrosion Resistent, Passivated,
Self Locking

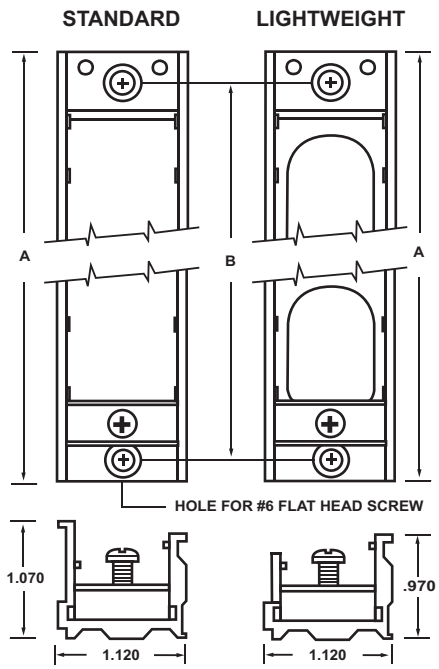
### Product Description

Amphenol Pcd offers feedback and feedthru mounting tracks, as well as a light weight feedback type with weight reduction cutouts per MIL-T-81714/16 for weight critical applications.

One track holds all module sizes. With size 22,20,16 modules requiring one mounting
space and size 12 requiring three.

Each track unit consists of an aluminum alloy track and MIL-T-81714/16 anodized black locking clamp. The stainless steel clamp screw is self locking to meet vibration, shock and temperature variation requirements.

### Feedback Track Dimensions

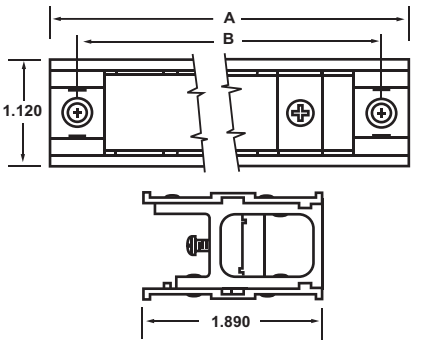



### Feedback Mounting Tracks

| Standard | | Lightweight | | Dimensions | | |
|---|---|---|---|---|---|---|
| Military P/N | APCD P/N | Military P/N | APCD P/N | Mounting Pos.* | A | B |
| M81714/5-1 | TJT701010 | M81714/16-1 | TJT703010 | 10 | 5.29 | 4.79 |
| | TJT701002 | | TJT703002 | 2 | 2.17 | 1.67 |
| M81714/5-2 | TJT701003 | M81714/16-2 | TJT703003 | 3 | 2.56 | 2.06 |
| M81714/5-3 | TJT701004 | M81714/16-3 | TJT703004 | 4 | 2.95 | 2.45 |
| M81714/5-4 | TJT701005 | M81714/16-4 | TJT703005 | 5 | 3.34 | 2.84 |
| M81714/5-5 | TJT701006 | M81714/16-5 | TJT703006 | 6 | 3.73 | 3.23 |
| M81714/5-6 | TJT701007 | M81714/16-6 | TJT703007 | 7 | 4.12 | 3.62 |
| M81714/5-7 | TJT701008 | M81714/16-7 | TJT703008 | 8 | 4.51 | 4.01 |
| M81714/5-8 | TJT701009 | M81714/16-8 | TJT703009 | 9 | 4.90 | 4.40 |
| M81714/5-9 | TJT701011 | M81714/16-9 | TJT703011 | 11 | 5.68 | 5.18 |
| M81714/5-10 | TJT701012 | M81714/16-10 | TJT703012 | 12 | 6.07 | 5.57 |
| M81714/5-11 | TJT701013 | M81714/16-11 | TJT703013 | 13 | 6.46 | 5.96 |
| M81714/5-12 | TJT701014 | M81714/16-12 | TJT703014 | 14 | 6.85 | 6.35 |
| M81714/5-13 | TJT701015 | M81714/16-13 | TJT703015 | 15 | 7.24 | 6.74 |
| | TJT701016 | | TJT703016 | 16 | 7.63 | 7.13 |
| | TJT701017 | | TJT703017 | 17 | 8.02 | 7.52 |
| | TJT701018 | | TJT703018 | 18 | 8.41 | 7.91 |
| | TJT701019 | | TJT703019 | 19 | 8.80 | 8.30 |
| | TJT701020 | | TJT703020 | 20 | 9.19 | 8.69 |

*Divide by 3 for Size 12 Module Mounting

### Feedthru Track Dimensions




### Feedthru Mounting Tracks

| Standard | | Dimensions | | |
|---|---|---|---|---|
| Military P/N | APCD P/N | Mounting Pos.* | A" | B" |
| M81714/10-1 | TJT702010 | 10 | 5.55 | 5.05 |
| | TJT702002 | 2 | 2.43 | 1.91 |
| M81714/10-2 | TJT702003 | 3 | 2.82 | 2.32 |
| M81714/10-3 | TJT702004 | 4 | 3.21 | 2.71 |
| M81714/10-4 | TJT702005 | 5 | 3.60 | 3.10 |
| M81714/10-5 | TJT702006 | 6 | 3.90 | 3.49 |
| M81714/10-6 | TJT702007 | 7 | 4.38 | 3.88 |
| M81714/10-7 | TJT702008 | 8 | 4.77 | 4.27 |
| M81714/10-8 | TJT702009 | 9 | 5.16 | 4.66 |

*Divide by 3 for Size 12 Module Mounting

# OCEAN CHIPS
## Океан Электроники
## Поставка электронных компонентов

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);
- 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**».

AVIC 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).

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