

# High Quality Interconnect Products For Military and Aerospace Applications

# Amphenol

## Amphenol Pcd

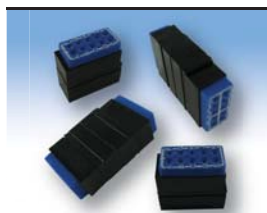


# Terminal Junction Systems

## 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 or 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 polyetherimide 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 electrical parameters of MIL-81714/24 and allow customers to incorporate system modifications into a wire bundle, avoiding changes in panels modules.



# Military Qualified, QPL-Listed

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

### Class D Feedback Modules

| Military P/N  | Amphenol 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   |
|               |                  |      |
| 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   |
|               |                  |      |
| 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   |
| M81714/6-DJ1 | TJM222709        | 36   |
|              |                  |      |
| 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   |
|              |                  |      |
| 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   |
|              |                  |      |
| 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   |

## Terminal Junction Modules



# M81714/1, /6

## Series I Size 22 Class D

### Operating Range

**Temperature:**

-65°C to 200°C

**Insulation Resistance:**

5000 Megaohms @ 25°C

**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

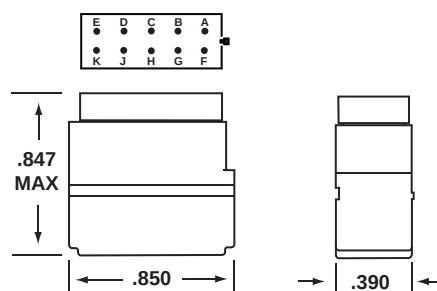
## Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback     |           | Feedthru     |           | QTY* | Size <sup>1</sup> | P/N M39029 |
|------------------------|--------------|-----------|--------------|-----------|------|-------------------|------------|
|                        | Military P/N | APCD P/N  | Military P/N | APCD P/N  |      |                   |            |
|                        | 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     |

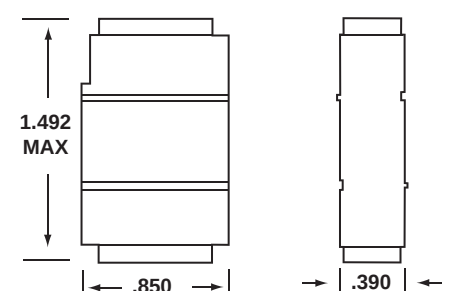
\*Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.  
<sup>1</sup>Mating Pin / Wire Barrel

## Terminal Junction Module Dimensions

### Feedback Dimensions



### Feedthru Dimensions



# M81714/2, /7

## Series I Size 20 Class D

### Terminal Junction Modules



#### Operating Range

##### Temperature:

-65°C to 200°C

##### Insulation Resistance:

5000 Megaohms @ 25°C

##### 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

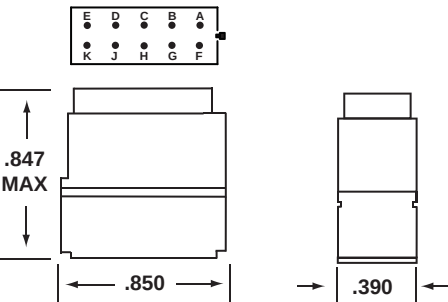
### Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback     |           | Feedthru     |           | Contact |                   |            |
|------------------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                        | Military P/N | APCD P/N  | Military P/N | APCD P/N  | QTY*    | Size <sup>1</sup> | 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     |

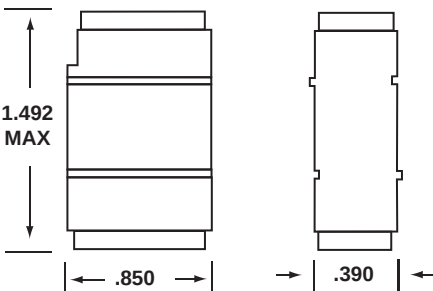
\* Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.  
<sup>1</sup> Mating Pin / Wire Barrel

### Terminal Junction Module Dimensions

#### Feedback Dimensions



#### Feedthru Dimensions



# Amphenol Pcd

## Terminal Junction Modules



# M81714/3, /8

## Series I Size 16 Class D

### Operating Range

#### Temperature:

-65°C to 200°C

#### Insulation Resistance:

5000 Megaohms @ 25°C

#### 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

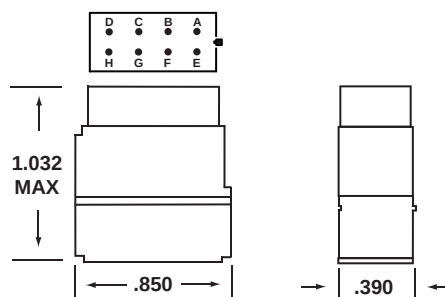
## Amphenol Pcd Terminal Junction Modules

| Bussing Configurations | Feedback     |           | Feedthru     |           | Contact |                   |            |
|------------------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                        | Military P/N | APCD P/N  | Military P/N | APCD P/N  | QTY*    | Size <sup>1</sup> | 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     |

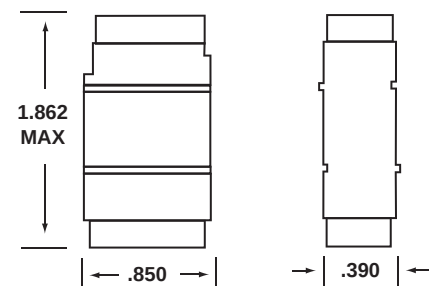
\* Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.  
<sup>1</sup> Mating Pin / Wire Barrel

## Terminal Junction Module Dimensions

### Feedback Dimensions



### Feedthru Dimensions



# M81714/4, /9

## Series I Size 12 Class D

### Operating Range

**Temperature:**  
-65°C to 200°C  
**Insulation Resistance:**  
5000 Megaohms @ 25°C  
**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



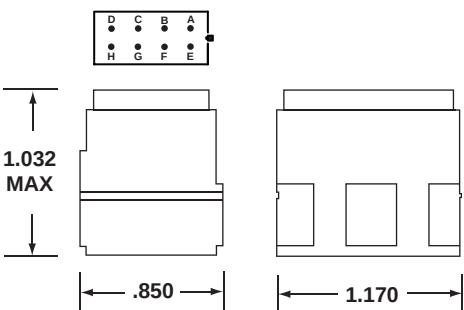
### Terminal Junction Modules

| Bussing Configurations | Feedback     |           | Feedthru     |           | Contact |                   |            |
|------------------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                        | Military P/N | APCD P/N  | Military P/N | APCD P/N  | QTY*    | Size <sup>1</sup> | 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 | M81714/9-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     |

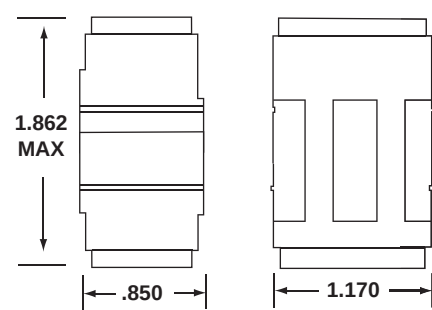
\* Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.  
<sup>1</sup> Mating Pin / Wire Barrel

### 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:

-65°C to 200°C

#### Insulation Resistance:

5000 Megaohms @ 25°C

#### 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 |

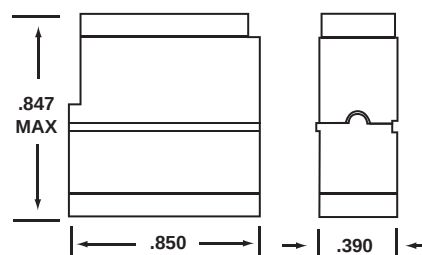
| Bussing Configurations | Feedback      |           |
|------------------------|---------------|-----------|
|                        | Military P/N  | APCD P/N  |
|                        | M81714/17-D38 | TJHD22708 |
|                        | M81714/17-D39 | TJHD22709 |
|                        | 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

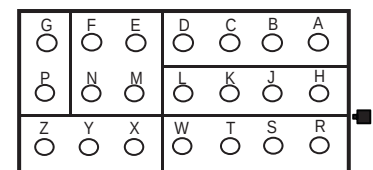


## Terminal Junction Module Dimensions

### Feedback Dimensions



### Bussing Configuration



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

# M81714/27 Ground Stud Modules

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

## Terminal Junction Modules



### Operating Range

**Temperature:**

-65°C to 200°C

**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 Equivalent P/N | APCD P/N  | QTY* | Size <sup>1</sup> | 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

<sup>1</sup> Quantity figure denotes number of contacts accommodated by module. Modules are supplied with two additional spare contacts and sealing plugs

## 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.

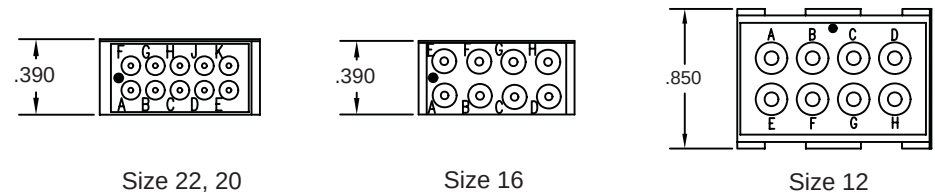
Direct mounting to a ground plane or ground wire with the terminal lug creates a convenient multi-wire sealed grounding device.

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

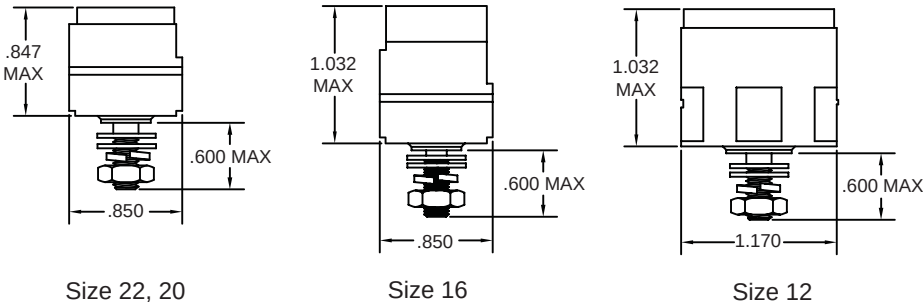
All modules are furnished with complete mounting hardware.

## Terminal Junction Module Dimensions

### Top View



### Side View



# Amphenol Pcd

## Terminal Junction Modules



# Electronic Terminal Junction Modules

MIL-T-81714/26 Compatible Class D

### Operating Range

**Temperature:**

-65°C to 200°C\*

**Insulation Resistance:**

5000 Megaohms Min. @ 25°C\*

**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:**

Polyetherimide 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 usually 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.

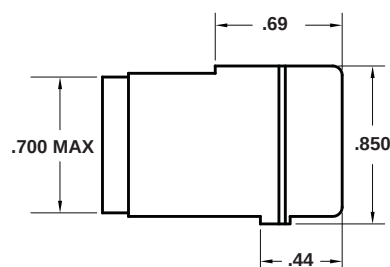
Typical commercially available diode configurations are indicated on this page. A broad variety of additional configurations are available, and modules can be customized to meet specific customer designs. Please contact Amphenol Pcd to review requirements and discuss available options.

## Amphenol Pcd Terminal Junction Module

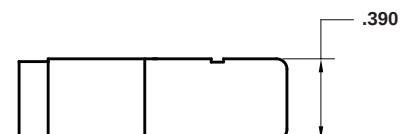
| Circuit Diagram | APCD P/N  | Diode P/N   | Quantity |
|-----------------|-----------|-------------|----------|
|                 | TJE120810 | JANTX1N5552 | 5        |
|                 | TJE120811 | JANTX1N5552 | 4        |
|                 | TJE120815 | 1N4005      | 2        |
|              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

### Terminal Junction Modules



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 $\Omega$ , 1/8 W    | 5        |
|                 | TJE120902 | Resistor  | 150K $\Omega$ , 1/8 W    | 5        |
|                 | TJE120903 | Resistor  | 33 $\Omega$ , 1/4 W      | 2        |
|                 | TJE120904 | Resistor  | 1K $\Omega$ , 1/8 W      | 2        |
|                 | TJE120905 | Resistor  | 1K $\Omega$ , 1/2 W      | 2        |
|                 | TJE120906 | Resistor  | 150 $\Omega$ , 1/2 W     | 1        |
|                 | TJE120907 | Resistor  | 180 $\Omega$ , 1/2 W     | 1        |
|                 | TJE120908 | Resistor  | Various $\Omega$ , 1/2 W | 5        |
|                 | TJE120920 | Resistor  | 54K, 6K $\Omega$ , 1/2W  | 2        |
|                 | TJE120921 | Resistor  | 500K $\Omega$ , 1 W      | 5        |
|                 | TJE120922 | Resistor  | Various $\Omega$ , 1/2 W | 5        |
|                 | TJE120924 | Resistor  | 1K $\Omega$ , 1/4 W      | 4        |
|                 | TJE120927 | Fuse      | 1 AMP                    | 5        |
|                 | TJE120928 | Resistor  | 1.3K $\Omega$ , 1/2 W    | 5        |

## Terminal Junction Splices



# Terminal Junction Splices

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

### Operating Range

**Temperature:**

-65°C to 200°C

**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:**

Polyetherimide 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 |

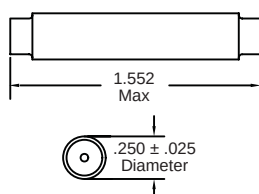
## Electronic Splices

| 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      |

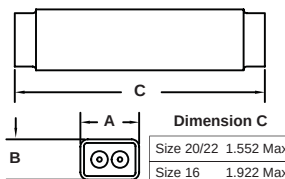
\*Mating Pin Wire Barrel

## Relay Socket Dimensions

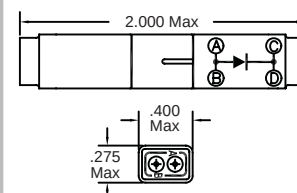
### Single Splice



### 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        |

## Terminal Junction Modules



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

## Terminal Junction Module Mounting Tracks

### Operating Range

#### Temperature:

-65° to 200°C

#### 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 Resistant, Passivated,

Self Locking

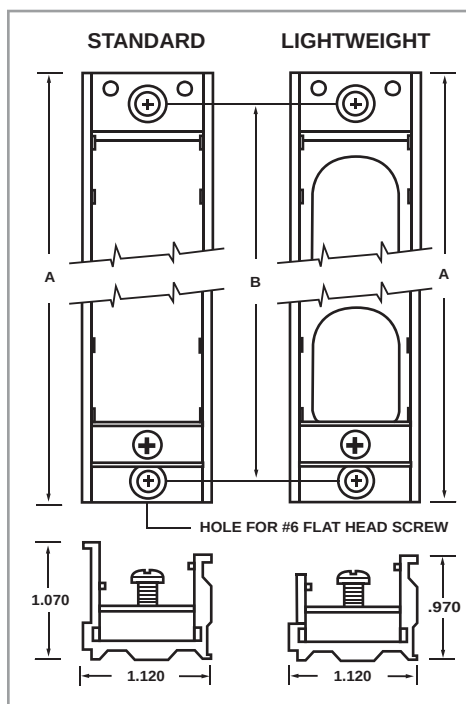
### Product Description

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

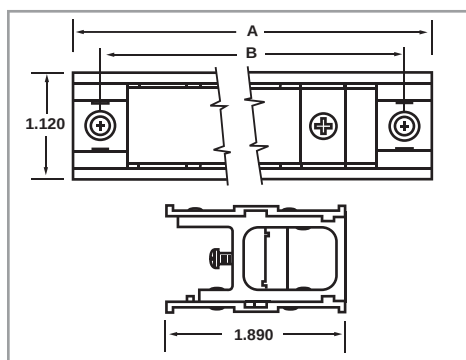


### Feedback Mounting Tracks

| 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

# Socket Junction Systems

## MIL-T-81714 Series I Class D

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

The high pin count, low weight MIL-T-81714 Series II Socket Junction Module System is available in four basic module sizes, accommodating 12-26 AWG wire in a broad selection of bussing arrangements. Modules are supplied with the appropriate and specified MIL-C-39029/22 socket contacts.



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



**Board Mount**  
**Modules**



**Ground Modules**



**Sealed Splices**



**Mounting Tracks**

### Key Features and Benefits

#### Improved Performance

Significant Amphenol Pcd design innovations over conventional Series II systems assure superior performance in wire sealing, contact alignment and retention, and module extraction.

#### Feedback Modules

The SJM feedback modules and mounting track system offer a lightweight junction system with a full range of bussing arrangements.

#### Distribution Modules

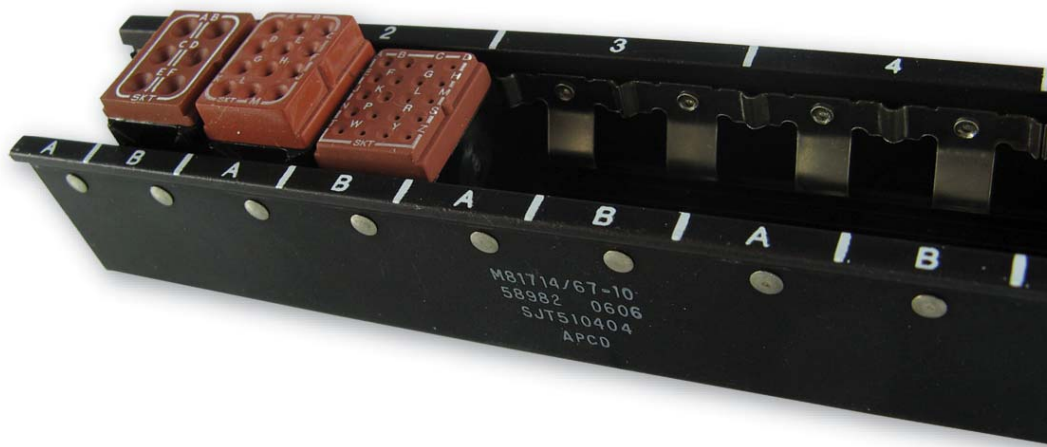
Distribution modules provide a variety of contact combinations for power distribution applications and have the same construction and features as the standard Series II modules.

#### Ground Modules

SJM grounding modules are available in both center stud and mounting flange versions.

#### Board Mount Pin Modules

The socket junction modules indicate on the following pages can also be provided in a solder pin version for mounting directly to printed circuit boards, providing a flexible, compact wiring package and eliminating the need for mounting track.



**Amphenol Pcd**

# Military Qualified, QPL-Listed

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

### Socket Junction Modules

| Military P/N    | Amphenol Pcd P/N | Page |
|-----------------|------------------|------|
| M81714/60-22-01 | SJM022100        | 49   |
| M81714/60-22-02 | SJM022200        | 49   |
| M81714/60-22-04 | SJM022400        | 49   |
| M81714/60-22-05 | SJM022500        | 49   |
| M81714/60-22-06 | SJM022600        | 49   |
| M81714/60-22-10 | SJM022700        | 49   |
|                 |                  |      |
| M81714/60-20-01 | SJM020100        | 50   |
| M81714/60-20-02 | SJM020200        | 50   |
| M81714/60-20-03 | SJM020300        | 50   |
| M81714/60-20-04 | SJM020400        | 50   |
| M81714/60-20-06 | SJM020600        | 50   |
|                 |                  |      |
| M81714/60-16-01 | SJM016100        | 51   |
| M81714/60-16-02 | SJM016200        | 51   |
| M81714/60-16-03 | SJM016300        | 51   |
|                 |                  |      |
| M81714/60-12-01 | SJM012100        | 51   |
| M81714/60-12-02 | SJM012200        | 51   |
| M81714/60-12-03 | SJM012300        | 51   |
|                 |                  |      |
| M81714/61-0Z    | SJM000100        | 52   |
| M81714/61-0Y    | SJM000800        | 52   |
| M81714/61-0X    | SJM000200        | 52   |
| M81714/61-0W    | SJM000300        | 52   |

### Socket Grounding Modules

| Military P/N  | Amphenol Pcd P/N | Page |
|---------------|------------------|------|
| M81714/63-22S | SJG022170        | 54   |
| M81714/63-20S | SJG020170        | 54   |
| M81714/63-16S | SJG016170        | 54   |
| M81714/63-22F | SJG022270        | 55   |
| M81714/63-20F | SJG020270        | 55   |
| M81714/63-16F | SJG016270        | 55   |
| M81714/63-12F | SJG016270        | 55   |

### Socket Junction Module Mounting Track

| Military P/N | Amphenol Pcd P/N | Page |
|--------------|------------------|------|
| M81714/67-02 | SJT502404        | 59   |
| M81714/67-03 | SJT503404        | 59   |
| M81714/67-04 | SJT504404        | 59   |
| M81714/67-05 | SJT505404        | 59   |
| M81714/67-06 | SJT506404        | 59   |
| M81714/67-07 | SJT507404        | 59   |
| M81714/67-08 | SJT508404        | 59   |
| M81714/67-09 | SJT509404        | 59   |
| M81714/67-10 | SJT510404        | 59   |
| M81714/67-12 | SJT512404        | 59   |
| M81714/67-13 | SJT513404        | 59   |
| M81714/67-14 | SJT514404        | 59   |
| M81714/67-15 | SJT515404        | 59   |
| M81714/67-16 | SJT516404        | 59   |
| M81714/67-18 | SJT518404        | 59   |
| M81714/67-19 | SJT519404        | 59   |
| M81714/67-20 | SJT520404        | 59   |
| M81714/67-21 | SJT521404        | 59   |
| M81714/67-25 | SJT525404        | 59   |
| M81714/67-30 | SJT530404        | 59   |
| M81714/67-32 | SJT532404        | 59   |
| M81714/67-40 | SJT540404        | 59   |

### In-Line Junction Splices

| Military P/N   | Amphenol Pcd P/N | Page |
|----------------|------------------|------|
| M81714/65-16-1 | SJS316700        | 58   |
| M81714/65-20-1 | SJS320700        | 58   |
| M81714/65-22-1 | SJS322700        | 58   |
| M81714/65-16-2 | SJS316701        | 58   |
| M81714/65-20-2 | SJS320701        | 58   |
| M81714/65-22-2 | SJS322701        | 58   |

# M81714/60-22

## Series II Size 22

### Operating Range

**Temperature:**  
-65°C to 200°C

**Insulation Resistance:**  
5000 Megaohms @ 25°C

**Dielectric Withstanding Voltage:**  
1500 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:**  
Polytherimide per ASTM-D5205

**Grommet:**  
Silicone Blend Elastomer per A-A-59588

**Contact Retainers:**  
Stainless Steel

**Internal Pin and Socket Contacts:**  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

### Socket Junction Modules



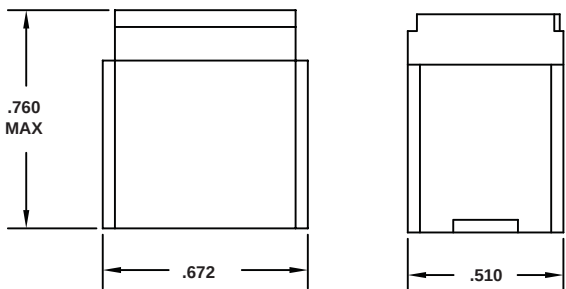
### Amphenol Pcd Socket Junction Modules

| Bussing Configurations | Part Numbers    |           | Contact |                   |            |
|------------------------|-----------------|-----------|---------|-------------------|------------|
|                        | Military P/N    | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                        | M81714/60-22-01 | SJM022100 | 20      | 22/22             | /22-191    |
|                        | M81714/60-22-02 | SJM022200 | 20      | 22/22             | /22-191    |
|                        | M81714/60-22-04 | SJM022400 | 20      | 22/22             | /22-191    |
|                        | M81714/60-22-05 | SJM022500 | 20      | 22/22             | /22-191    |
|                        | M81714/60-22-06 | SJM022600 | 20      | 22/22             | /22-191    |
|                        | M81714/60-22-07 | SJM022700 | 20      | 22/22             | /22-191    |

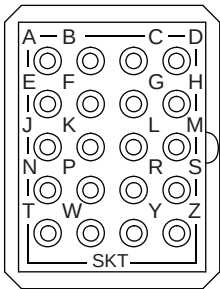
\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contacts and two sealing plugs.  
<sup>1</sup>Mating End / Wire Barrel.

### Socket Junction Module Dimensions

#### Front & Side View



#### Top View



M81714/60-22-01 SHOWN



# Amphenol Pcd

## Socket Junction Modules

# M81714/60-20

## Series II Size 20



### Operating Range

**Temperature:**

-65°C to 200°C

**Insulation Resistance:**

5000 Megaohms @ 25°C

**Dielectric Withstanding Voltage:**

1500 VRMS at Sea Level

200 VRMS at 110,000 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

**Internal Pin and Socket Contacts:**

Copper Alloy, Hard Gold Plated in

Accordance with MIL-G-45204

## Amphenol Pcd Socket Junction Modules

| Bussing Configurations | Part Numbers    |           | Contact |                   |            |
|------------------------|-----------------|-----------|---------|-------------------|------------|
|                        | Military P/N    | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                        | M81714/60-20-01 | SJM020100 | 12      | 20/20             | /22-192    |
|                        | M81714/60-20-02 | SJM020200 | 12      | 20/20             | /22-192    |
|                        | M81714/60-20-03 | SJM020300 | 12      | 20/20             | /22-192    |
|                        | M81714/60-20-04 | SJM020400 | 12      | 20/20             | /22-192    |
|                        | M81714/60-20-06 | SJM020600 | 12      | 20/20             | /22-192    |

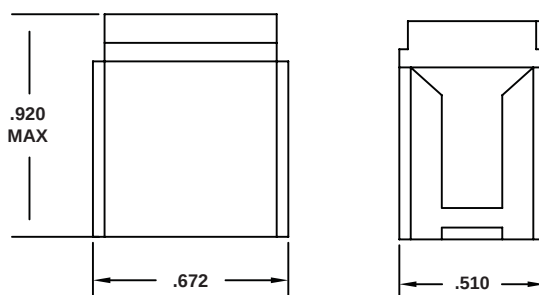
\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contacts and two sealing plugs.

<sup>1</sup>Mating End / Wire Barrel.

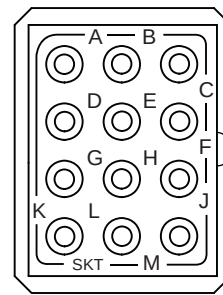


## Socket Junction Module Dimensions

### Front & Side View



### Top View



M81714/60-20-01 SHOWN

# M81714/60-16

## Series II Size 16

### Socket Junction Modules



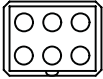
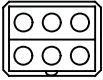
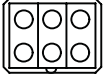
#### Operating Range

**Temperature:**  
-65°C to 200°C  
**Insulation Resistance:**  
5000 Megaohms @ 25°C  
**Dielectric Withstanding Voltage:**  
1500 VRMS at Sea Level  
200 VRMS at 110,000 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  
**Internal Pin and Socket Contacts:**  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

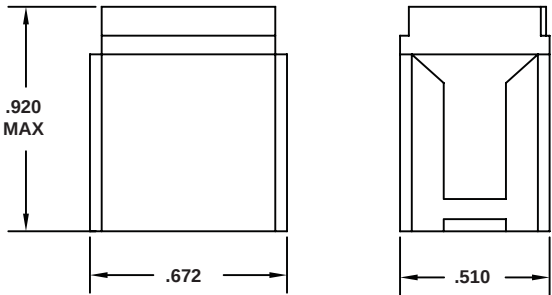
### Amphenol Pcd Socket Junction Modules

| Bussing Configurations                                                              | Part Numbers    |           | Contact |                   |            |
|-------------------------------------------------------------------------------------|-----------------|-----------|---------|-------------------|------------|
|                                                                                     | Military P/N    | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|    | M81714/60-16-01 | SJM016100 | 6       | 16/16             | /22-193    |
|  | M81714/60-16-02 | SJM016200 | 6       | 16/16             | /22-193    |
|  | M81714/60-16-03 | SJM016300 | 6       | 16/16             | /22-193    |

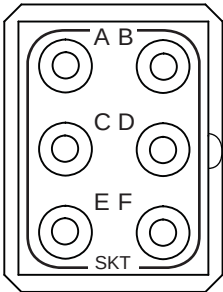
\* Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contacts and two sealing plugs.  
<sup>1</sup> Mating End / Wire Barrel.

### Socket Junction Module Dimensions

#### Front & Side View



#### Top View



# Amphenol Pcd

## Socket Junction Modules

# M81714/60-12

## Series II Size 12



### Operating Range

#### Temperature:

-65°C to 200°C

#### Insulation Resistance:

5000 Megaohms @ 25°C

#### Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

200 VRMS at 110,000 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 Pin and Socket Contacts:

Copper Alloy, Hard Gold Plated in

Accordance with MIL-G-45204

## Amphenol Pcd Socket Junction Modules

| Bussing Configurations | Part Numbers    |           | Contact |                   |            |
|------------------------|-----------------|-----------|---------|-------------------|------------|
|                        | Military P/N    | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                        | M81714/60-12-01 | SJM012100 | 6       | 12/12             | /22-605    |
|                        | M81714/60-12-02 | SJM012200 | 6       | 12/12             | /22-605    |
|                        | M81714/60-12-03 | SJM012300 | 6       | 12/12             | /22-605    |

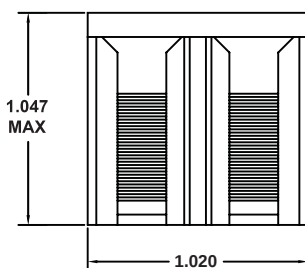
\* Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contacts and two sealing plugs.

<sup>1</sup> Mating End / Wire Barrel.

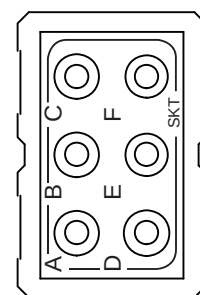


## Socket Junction Module Dimensions

### Front & Side View



### Top View



M81714/60-12-01 SHOWN

# M81714/61 Series II

## Distribution Socket Junction Modules

### Socket Junction Modules



### Operating Range

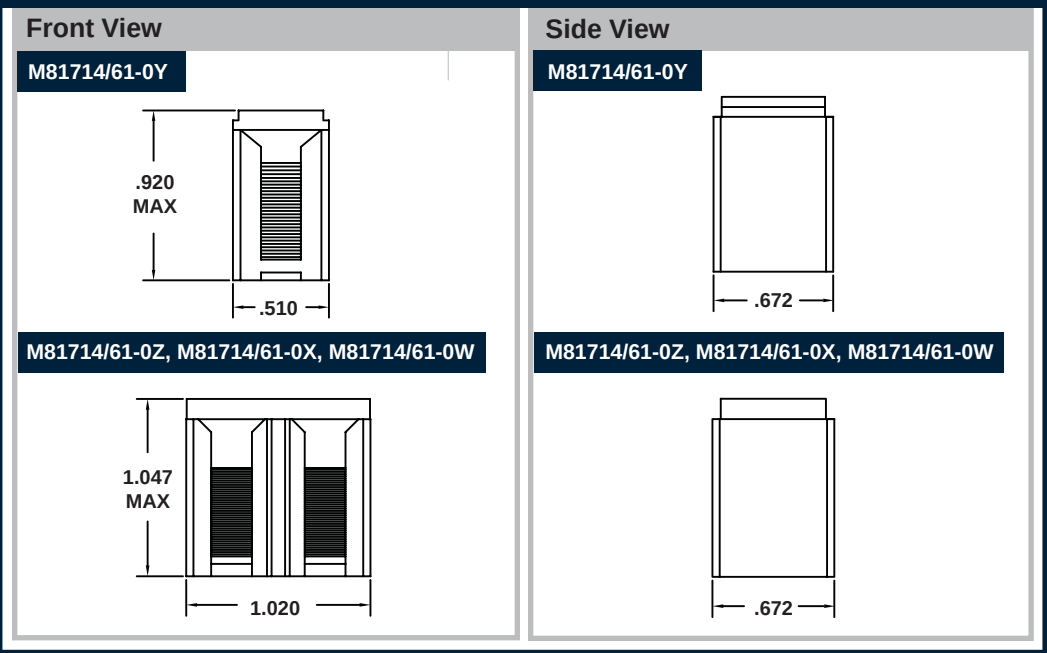
**Temperature:**  
-65°C to 200°C  
**Insulation Resistance:**  
5000 Megaohms @ 25°C  
**Dielectric Withstanding Voltage:**  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.  
**Current Rating**  
5 Amps (Size 22)  
7.5 Amps (Size 20)  
13 Amps (Size 16)  
23 Amps (Size 12)  
**Vibration & Shock:**  
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  
**Contact Retainers:**  
Stainless Steel  
**Internal Pin and Socket Contacts:**  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

### Amphenol Pcd Socket Junction Modules

| Bussing Configurations | Part Numbers |           | Contact |      |            | Bussing                                                        |
|------------------------|--------------|-----------|---------|------|------------|----------------------------------------------------------------|
|                        | Military P/N | APCD P/N  | QTY     | Size | P/N M39029 | Bus Description                                                |
|                        | M81714/61-0Z | SJM000100 | 6       | 16   | /22-193    | 1 BUS<br>TWO SIZE 12 &<br>SIX SIZE 16                          |
|                        |              |           | 2       | 12   | /22-605    |                                                                |
|                        | M81714/61-0Y | SJM000800 | 6       | 20   | /22-192    | 1 BUS<br>TWO SIZE 16 &<br>SIX SIZE 20                          |
|                        |              |           | 2       | 16   | /22-193    |                                                                |
|                        | M81714/61-0X | SJM000200 | 6       | 16   | /22-193    | 2 BUSSES<br>ONE SIZE 12 &<br>THREE SIZE 16 PER BUS             |
|                        |              |           | 2       | 12   | /22-605    |                                                                |
|                        | M81714/61-0W | SJM000500 | 5       | 22   | /22-191    | 5 BUSSES<br>ONE SIZE 22 & ONE SIZE 20<br>& ONE SIZE 16 PER BUS |
|                        |              |           | 5       | 20   | /22-192    |                                                                |
|                        |              |           | 5       | 16   | /22-193    |                                                                |

### Socket Junction Module Dimensions



### Product Description

Distribution Socket Junction Modules are available in a variety of MIL-T-81714 configurations, feature the same construction and features as the standard Series II high density modules, and are recommended for power distribution applications



# Amphenol Pcd

# M81714/63 Socket Ground Modules

## Stud Mount Series II Size 16, 20, 22

### Socket Junction Modules



#### Operating Range

##### Temperature:

-65°C to 200°C

##### Current Rating

5 Amps (Size 22)

7.5 Amps (Size 20)

13 Amps (Size 16)

##### 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

##### Stud / Shell:

Copper Alloy, Gold Plated per

SAE-AMS-2422. Tin Plating per

ASTM-B545 Also Available as an Alternate

##### Contact Retainers:

Stainless Steel

##### Socket Contacts:

Copper Alloy, Hard Gold Plated in

Accordance with MIL-G-45204

### Product Description

M81714/ 63, stud mount, socket grounding modules mount directly to a ground plane or ground lug creating a multi-wire sealed grounding device. The grounding modules could also be mounted to a bus bar for power distribution, sensing or metering. All mounting hardware is furnished and custom hardware configurations are available. The mounting stud is available in gold or tin plating.

### Socket Grounding Modules Part Numbers

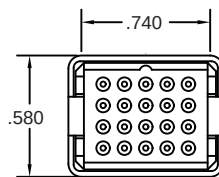
| Part Numbers  |           |      | Contact           |            | Stud    |
|---------------|-----------|------|-------------------|------------|---------|
| Military P/N  | APCD P/N  | QTY* | Size <sup>1</sup> | P/N M39029 | Plating |
| M81714/63-22S | SJG022170 | 20   | 22/22             | /22-191    | Gold    |
|               | SJG022100 | 20   | 22/22             | /22-191    | Tin     |
| M81714/63-20S | SJG020170 | 12   | 20/20             | /22-192    | Gold    |
|               | SJG020100 | 12   | 20/20             | /22-192    | Tin     |
| M81714/63-16S | SJG016170 | 6    | 16/16             | /22-193    | Gold    |
|               | SJG016100 | 6    | 16/16             | /22-193    | Tin     |

\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contacts and two sealing plugs

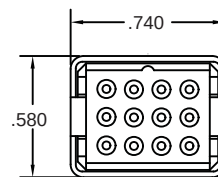
<sup>1</sup> Mating End/ Wire Barrel

### Socket Junction Module Dimensions

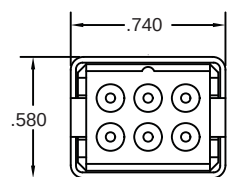
#### Top View



Size 22

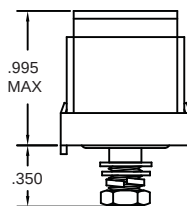


Size 20

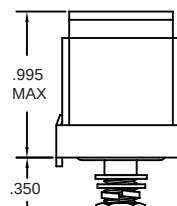


Size 16

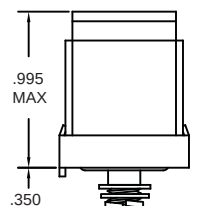
#### Side View



Size 22



Size 20



Size 16

# M81714/63 Socket Ground Modules

## Flange Mount Series II Size 12, 16, 20, 22

### Socket Junction Modules



#### Operating Range

**Temperature:**  
-65°C to 200°C  
**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  
**Flange / Shell:**  
Copper Alloy, Gold Plated per  
SAE-AMS-2422. Tin Plating per  
ASTM-B545 Also Available as an Alternate  
**Contact Retainers:**  
Stainless Steel  
**Socket Contacts:**  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

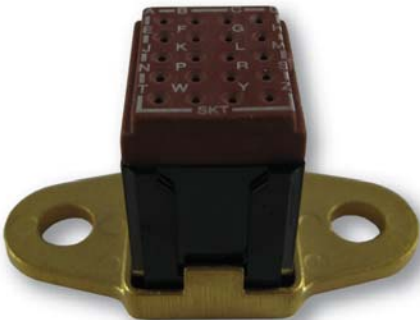
### Socket Grounding Modules Part Numbers

| Part Numbers  |           |      | Contact           |            | Flange  |
|---------------|-----------|------|-------------------|------------|---------|
| Military P/N  | APCD P/N  | QTY* | Size <sup>1</sup> | P/N M39029 | Plating |
| M81714/63-22F | SJG022270 | 20   | 22/22             | /22-191    | Gold    |
|               | SJG022200 | 20   | 22/22             | /22-191    | Tin     |
| M81714/63-20F | SJG020270 | 12   | 20/20             | /22-192    | Gold    |
|               | SJG020200 | 12   | 20/20             | /22-192    | Tin     |
| M81714/63-16F | SJG016270 | 6    | 16/16             | /22-193    | Gold    |
|               | SJG016200 | 6    | 16/16             | /22-193    | Tin     |
| M81714/63-12F | SJG012270 | 6    | 12/12             | /22-605    | Gold    |
|               | SJG012200 | 6    | 12/12             | /22-605    | Tin     |

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

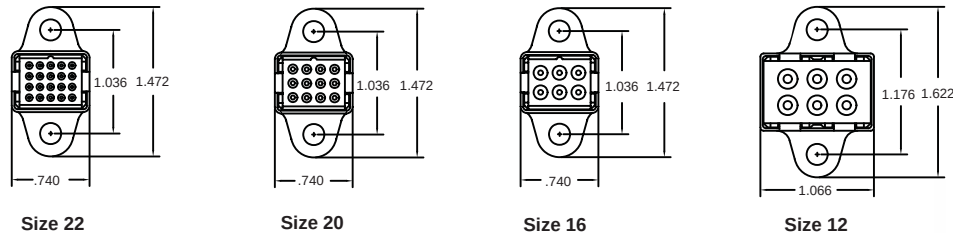
#### Product Description

M81714/ 63, flange mount, socket grounding modules mount directly to a ground plane or ground lug creating a multi-wire sealed grounding device. The grounding modules could also be mounted to a bus bar for power distribution, sensing or metering. All mounting hardware is furnished and custom hardware configurations are available. The mounting stud is available in gold or tin plating.

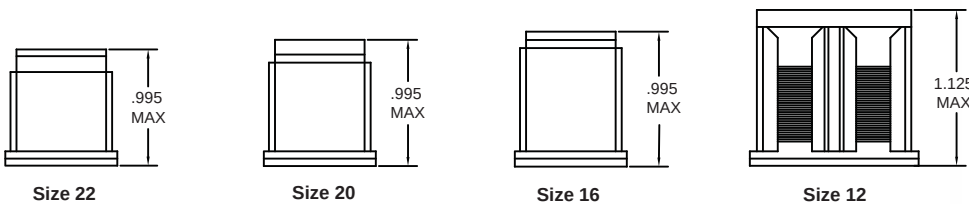


### Socket Junction Module Dimensions

#### Top View



#### Side View



# Amphenol Pcd

## Socket Junction Modules



# Board Mount Socket Junction Modules

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

### Operating Range

**Temperature:**

-65°C to 125°C

**Insulation Resistance:**

1000 Megaohms Min.

**Dielectric Withstanding Voltage:**

1500 VRMS at Sea Level

200 VRMS at 80,000 ft.

**Current rating:**

5 Amps (Size 22)

7.5 Amps (Size 20)

13 Amps (Size 16)

23 Amps (Size 12)

### Materials

**Module Body:**

Polytherimide per ASTM-D5205

**Grommet:**

Silicone Blend Elastomer per A-A-59588

**Contact Retainers:**

Stainless Steel

**Socket Contacts:**

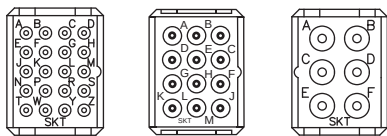
Copper Alloy, Hard Gold Plated in

Accordance with MIL-G-45204

## Product Description

The socket junction modules indicate on the following pages can also be provided in a solder pin version for mounting directly to printed circuit boards, providing a flexible, compact wiring package and eliminating the need for mounting track. Please contact Amphenol Pcd for details on the SJP pin module.

## Module Configurations



A

B

C



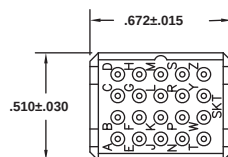
## Board Mount Socket Junctions

| APCD P/N  | QTY | Size  | Contact P/N   | Config. | DIM. L |
|-----------|-----|-------|---------------|---------|--------|
| SJP022000 | 20  | 22/22 | M39029/22-191 | A       | .187   |
| SJP022010 | 20  | 22/22 | M39029/22-191 | A       | .250   |
| SJP020000 | 12  | 20/20 | M39029/22-192 | B       | .187   |
| SJP020010 | 12  | 20/20 | M39029/22-192 | B       | .250   |
| SJP016000 | 6   | 16/16 | M39029/22-193 | C       | .187   |
| SJP016010 | 6   | 16/16 | M39029/22-193 | C       | .250   |
| SJP012000 | 6   | 12/12 | M39029/22-605 | D       | .187   |
| SJP012010 | 6   | 12/12 | M39029/22-605 | D       | .250   |
| SJP012010 | 6   | 12/12 | M39029/22-605 | D       | .335   |

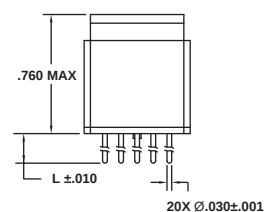
## Board Mount Socket Junction Modules Dimensions

### Size 22

#### Side View

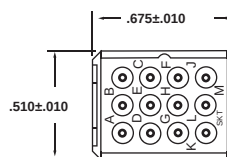


#### Side View

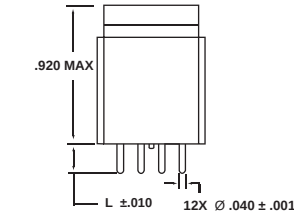


### Size 20, 16

#### Side View

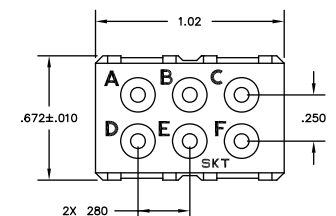


#### Side View

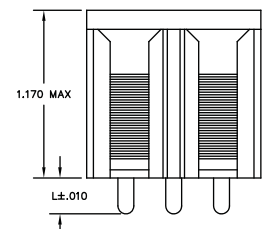


### Size 12

#### Side View



#### Side View



Amphenol Pcd

# Electronic Socket Junction Modules

## SJE Component Modules

### Operating Range

#### Temperature:

-65°C to 200°C

#### Insulation Resistance:

5000 Megaohms Min.

#### Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

200 VRMS at 100,000 ft.

#### Vibration & Shock:

Per MIL-T-81714

Paragraph 3.5.5 & 3.5.8

### Materials

#### Insulator Body:

Polyetherimide per ASTM-D-5205

#### Grommet:

Silicone Rubber per A-A-59588

#### Internal Contact:

Copper Alloy, Gold Finish

per SAE-AMS-MIL-G-45204

## Socket Junction Modules



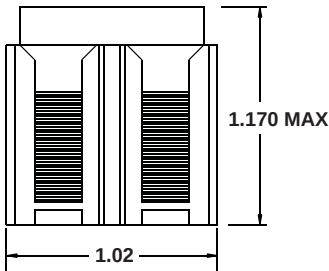
## Electronic Socket Junction Modules

## Product Descriptions

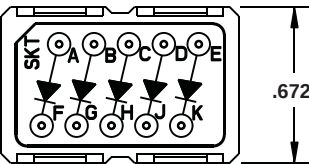
Amphenol Pcd's Electronic Socket Junction Modules are available with a variety of components and in a wide range of configurations. Components available include, but are not limited to, diodes, resistors, fuses, thyristors, and inductors, and are also available with multiple components within one module.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

## Junction Module Dimensions

Side View



Top View



Amphenol Pcd

| Circuit Diagram | APCD P/N  | Component | Quantity |
|-----------------|-----------|-----------|----------|
|                 | SJE020001 | Diode     | 5        |
|                 | SJE020003 | Diode     | 4        |
|                 | SJE020006 | Resistor  | 5        |
|                 | SJE020008 | Diode     | 2        |
|                 | SJE020009 | Diode     | 5        |
|                 | SJE020016 | Diode     | 5        |
|                 | SJE020017 | Resistor  | 4        |
|                 | SJE020022 | Diode     | 5        |
|                 | SJE020045 | Diode     | 5        |
|                 | SJE020290 | Resistor  | 2        |
|                 | SJE020297 | Fuse      | 5        |

## Socket Junction Splices



# M81714/65 Sealed In-Line Splices

## SJS Series II Single and Double

### Operating Range

#### Temperature:

-65°C to 200°C

#### Insulation Resistance:

5000 Megaohms Min.

#### Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

200 VRMS at 100,000 ft.

#### Vibration & Shock:

Per MIL-T-81714

Paragraph 3.5.5 & 3.5.8

#### Current Rating:

13 Amps (Size 16)

7.5 Amps (Size 20)

5 Amps (Size 22)

### Materials

#### Insulator Body:

Polyetherimide per ASTM-D-5205

#### Grommet:

Silicone Rubber per A-A-59588

#### Internal Contact:

Copper Alloy, Gold Finish

Accordance with MIL-G-45204

## Product Description

Series II In-Line Splices are available in single and double configurations in sizes 16, 20, and 22 AWG. These M81714/65 Splices use the same advanced polyetherimide body, one-piece bus assembly and construction as Amphenol Pcd's other M81714 connectors.

## Single SJS Splices

|  | Military P/N   | APCD P/N  | Ø Diameter |
|--|----------------|-----------|------------|
|  | M81714/65-16-1 | SJS316700 | .324 Max   |
|  | M81714/65-20-1 | SJS320700 | .290 Max   |
|  | M81714/65-22-1 | SJS322700 | .230 Max   |

## Double SJS Splices

|  | Military P/N   | APCD P/N  | A        | B        | C        |
|--|----------------|-----------|----------|----------|----------|
|  | M81714/65-16-2 | SJS316701 | .548 Max | .304 Max | .180 Max |
|  | M81714/65-20-2 | SJS320701 | .481 Max | .271 Max | .150 Max |
|  | M81714/65-22-2 | SJS322701 | .384 Max | .204 Max | .120 Max |

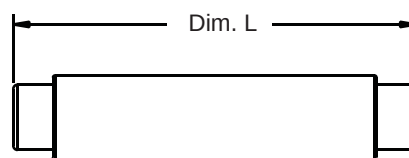
## Sealed Splice Contacts

| In-Line Splice | Contact       |
|----------------|---------------|
| M81714/65-16-1 | M39029/22-193 |
| M81714/65-20-1 | M39029/22-192 |
| M81714/65-22-1 | M39029/22-191 |
| M81714/65-16-2 | M39029/22-193 |
| M81714/65-20-2 | M39029/22-192 |
| M81714/65-22-2 | M39029/22-191 |

## Splice Dimensions

### SJS Single Splice

#### Side View



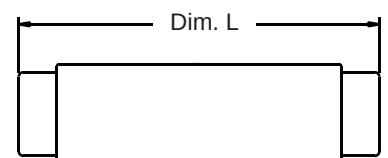
#### Wire Size

#### Dimension L

|         |           |
|---------|-----------|
| Size 16 | 1.452 Max |
| Size 20 | 1.434 Max |
| Size 22 | 1.310 Max |

### SJS Double Splice

#### Side View



#### Wire Size

#### Dimension L

|         |           |
|---------|-----------|
| Size 16 | 1.428 Max |
| Size 20 | 1.428 Max |
| Size 22 | 1.322 Max |

# M81714/67 Series II

## Socket Junction Module Mounting Tracks

### Operating Range

#### Temperature:

-65° to 200°C

#### 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

#### Spring Clips:

Stainless Steel

#### Rivets:

Stainless Steel

## Socket Junction Modules



## Socket Junction Modules Mounting Tracks

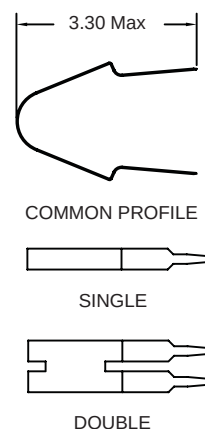
| Military P/N | APCD      | Mounting Pos.* | Dimensions |        |
|--------------|-----------|----------------|------------|--------|
|              |           |                | A          | B      |
| M81714/67-02 | SJT502404 | 2              | 1.036      | 0.518  |
| M81714/67-03 | SJT503404 | 3              | 1.554      | 1.036  |
| M81714/67-04 | SJT504404 | 4              | 2.072      | 1.554  |
| M81714/67-05 | SJT505404 | 5              | 2.590      | 2.072  |
| M81714/67-06 | SJT506404 | 6              | 3.108      | 2.590  |
| M81714/67-07 | SJT507404 | 7              | 3.626      | 3.108  |
| M81714/67-08 | SJT508404 | 8              | 4.144      | 3.626  |
| M81714/67-09 | SJT509404 | 9              | 4.662      | 4.144  |
| M81714/67-10 | SJT510404 | 10             | 5.180      | 4.662  |
| M81714/67-12 | SJT512404 | 12             | 6.216      | 5.698  |
| M81714/67-13 | SJT513404 | 13             | 6.734      | 6.216  |
| M81714/67-14 | SJT514404 | 14             | 7.252      | 6.734  |
| M81714/67-15 | SJT515404 | 15             | 7.770      | 7.252  |
| M81714/67-16 | SJT516404 | 16             | 8.288      | 7.770  |
| M81714/67-18 | SJT518404 | 18             | 9.324      | 8.806  |
| M81714/67-19 | SJT519404 | 19             | 9.842      | 9.324  |
| M81714/67-20 | SJT520404 | 20             | 10.360     | 9.842  |
| M81714/67-21 | SJT521404 | 21             | 10.878     | 10.360 |
| M81714/67-25 | SJT525404 | 25             | 12.950     | 12.432 |
| M81714/67-30 | SJT530404 | 30             | 15.540     | 15.022 |
| M81714/67-32 | SJT532404 | 32             | 16.576     | 16.058 |
| M81714/67-40 | SJT540404 | 40             | 20.720     | 20.202 |

\*Size 12 Modules require two mounting positions

## Removal Tools

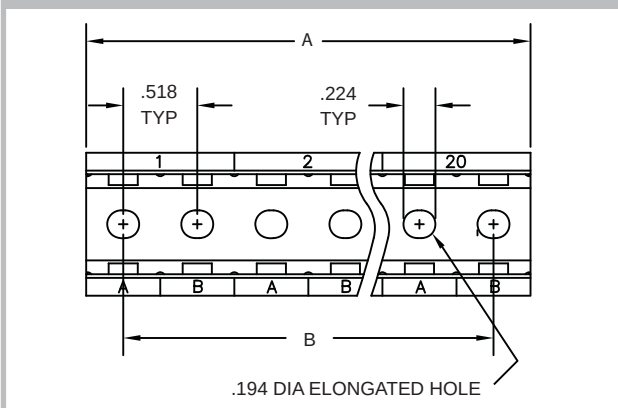
| MIL P/N      | APCD P/N  | Description |
|--------------|-----------|-------------|
| M81714/69-01 | CNA051300 | Single      |
| M81714/69-02 | CNA052300 | Double      |

## Removal Tools

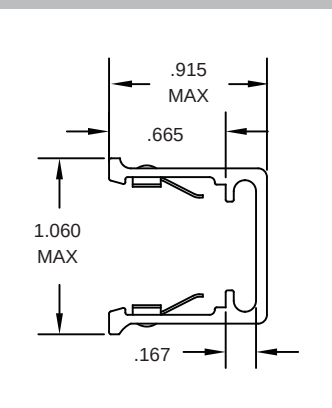


## Socket Junction Track Dimensions

### Top View



### Cross Section



Amphenol Pcd

## Socket Junction Modules



# M81714/67 Series II

## Composite Socket Junction Module Mounting Tracks

### Operating Range

#### Temperature:

-65° to 175°C

#### Vibration and Shock:

Per MIL-T-81714 Paragraph

3.5.5 and 3.5.8

### Materials

#### Rail:

Glass Filled Polythermide,

Color: Black

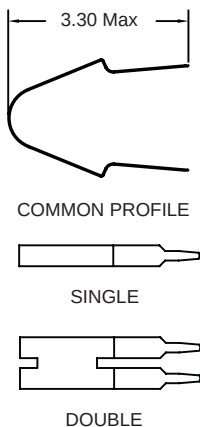
## Product Description

The SJTC Mounting Track is fabricated of glass-filled polyetherimide which was selected for its unique combination of high strength, lightweight, chemical resistance and dimensional stability. The track is available with 2 through 20 mounting positions and is inter-changeable with existing aluminum track. The new track is 45% lighter than the aluminum track and 10% lighter than any other series II track available, and meets all dimensional requirements of MIL-T-81714.

## Removal Tools

| MIL P/N      | APCD P/N  | Description |
|--------------|-----------|-------------|
| M81714/69-01 | CNA051300 | Single      |
| M81714/69-02 | CNA052300 | Double      |

## Removal Tools



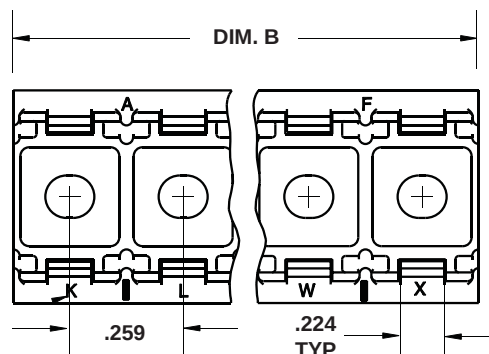
## Composite Socket Junction Module Mounting Tracks

| Military Equivalent P/N | APCD P/N  | Mounting Pos. | Dimensions |       |
|-------------------------|-----------|---------------|------------|-------|
|                         |           |               | A          | B     |
| M81714/67-02            | SJTC02000 | 2             | 1.036      | 0.518 |
| M81714/67-03            | SJTC03000 | 3             | 1.554      | 1.036 |
| M81714/67-04            | SJTC04000 | 4             | 2.072      | 1.554 |
| M81714/67-05            | SJTC05000 | 5             | 2.590      | 2.072 |
| M81714/67-06            | SJTC06000 | 6             | 3.108      | 2.590 |
| M81714/67-07            | SJTC07000 | 7             | 3.626      | 3.108 |
| M81714/67-08            | SJTC08000 | 8             | 4.144      | 3.626 |
| M81714/67-09            | SJTC09000 | 9             | 4.662      | 4.144 |
| M81714/67-10            | SJTC10000 | 10            | 5.180      | 4.662 |
|                         | SJTC11000 | 11            | 5.698      | 5.180 |
| M81714/67-12            | SJTC12000 | 12            | 6.216      | 5.698 |
| M81714/67-13            | SJTC13000 | 13            | 6.734      | 6.216 |
| M81714/67-14            | SJTC14000 | 14            | 7.252      | 6.734 |
| M81714/67-15            | SJTC15000 | 15            | 7.770      | 7.252 |
| M81714/67-16            | SJTC16000 | 16            | 8.288      | 7.770 |
|                         | SJTC17000 | 17            | 8.806      | 8.288 |
| M81714/67-18            | SJTC18000 | 18            | 9.324      | 8.806 |
| M81714/67-19            | SJTC19000 | 19            | 9.842      | 9.324 |
| M81714/67-20            | SJTC20000 | 20            | 10.360     | 9.842 |

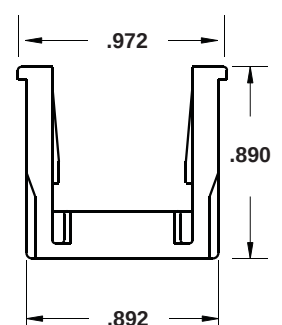
\*Size 12 Modules require two mounting positions

## Composite Socket Junction Module Mounting Tracks

### Top View



### Cross Section



# Wire Junctions and System Attachments

## MIL-T-81714, M39029, Cable Supports

### Wire Junctions and Attachments

Amphenol Pcd offers a variety of Junctions, Splices, Contacts, and Attachments for a wide range of wiring applications. Amphenol Pcd welcomes customer inquiries regarding customization of existing products as well as inquiries about new products. Amphenol Pcd is committed to providing complete solutions to all interconnect requirements.



**SJS In-Line Junctions**



**High Performance  
Clamps**



**Military  
Specification  
Contacts**

### Product features and Benefits

#### SJS In-Line Junctions

Environmentally sealed In-Line Junction Splices developed to bring higher reliability, improved installation ease, and greater flexibility to wiring applications.

#### High Performance Clamps

High Performance Clamps are designed to replace and outperform traditional P-Clamps & Saddle Clamps. Consisting of VICTREX® PEEK™ polymer and featuring an over-molded silicone cushion, these clamps are completely non-corrosive and non-conductive. These High Performance Clamps are designed to be lighter than traditional P-Clamps and are equipped with a locking feature to streamline installation.

#### Military Specification Contacts

Amphenol Pcd offers contacts for almost every connector, module or socket they produce. Contacts can be purchased with the parts or separately.

## SJS In-Line Junctions



# Single Contact In-Line Junction

## SJS Plugs & Receptacles Size 16, 20

### Operating Range

#### Temperature:

-55°C to 155°C

#### Insulation Resistance:

5000 Megaohms Min.

#### Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

600 VRMS at 45,000 ft.

#### Vibration:

EIA-364D-028D, Test Condition V, E

#### Sealing:

EIA-364D-03B ( 55,000 ft )

#### Flammability Rating:

UL94, V0

#### CTI Rating:

UL746B, 600V

#### Contact Retention:

EIA-364D-029B ( 20lb )

### Materials

#### Insulator Body:

Polyamide ( Nylon )

#### Grommet:

Silicone Rubber per A-A-59588

#### Contact Retainers:

Stainless Steel

### Product Description

Two-piece environmentally sealed In-Line Junction designed to bring higher reliability, improved installation ease, and greater flexibility to wiring applications. Developed to meet MIL-T-81714 criteria, these in-line junctions consist of compact cylindrical plug and receptacle housing, which lock firmly together with a straight push and unlock with a simple "Twist and Pull" motion. In-Line Junctions are available with protective dust covers and are available in two colors per size. Wire Size 12 SJS and panel mount versions are currently in development.

### In-Line Junction Plugs

| Size | Part No.  | Length |      | Diameter |      | Mated Length |      | Color  |
|------|-----------|--------|------|----------|------|--------------|------|--------|
|      |           | inch   | cm   | inch     | cm   | inch         | cm   |        |
| 16   | SJS716100 | 1.13   | 2.87 | 0.39     | 0.99 | 1.65         | 4.20 | Blue   |
|      | SJS716110 |        |      |          |      |              |      | Red    |
| 20   | SJS720100 | 1.11   | 2.81 | 0.39     | 0.99 | 1.70         | 4.30 | Green  |
|      | SJS720110 |        |      |          |      |              |      | Yellow |

### In-Line Junction Contacts

| In-Line Junction    | Contact                |
|---------------------|------------------------|
| Size 16 Plugs       | M39029/56-352 (socket) |
| Size 16 Receptacles | M39029/56-351 (socket) |
| Size 20 Plugs       | M39029/58-364 (pin)    |
| Size 20 Receptacles | M39029/58-363 (pin)    |

### In-Line Junction Receptacles

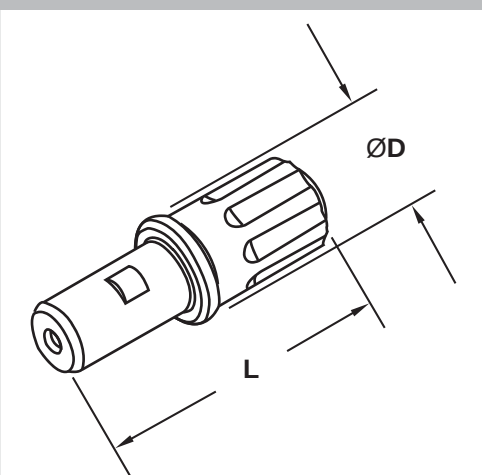
| Size | Part No.  | Length |      | Diameter |      | Mated Length |      | Color  |
|------|-----------|--------|------|----------|------|--------------|------|--------|
|      |           | inch   | cm   | inch     | cm   | inch         | cm   |        |
| 16   | SJS716200 | 1.06   | 2.69 | 0.43     | 1.09 | 1.65         | 4.20 | Blue   |
|      | SJS716210 |        |      |          |      |              |      | Red    |
| 20   | SJS720200 | 1.03   | 2.61 | 0.39     | 0.99 | 1.70         | 4.30 | Green  |
|      | SJS720210 |        |      |          |      |              |      | Yellow |

### In-Line Junction Weight

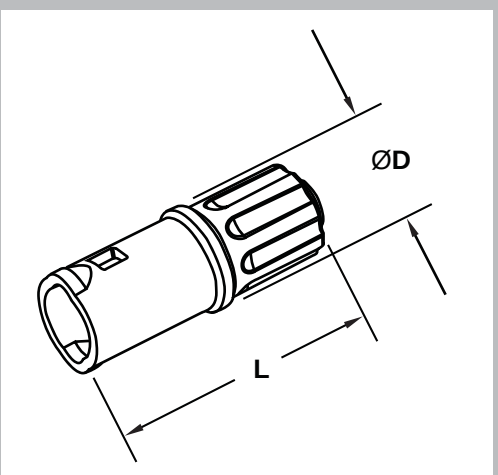
| In-Line Junction | Pounds | Grams |
|------------------|--------|-------|
| SJS716100        | .0037  | 1.70  |
| SJS716200        | .0031  | 1.40  |
| SJS720100        | .0033  | 1.50  |
| SJS720200        | .0026  | 1.20  |

### In Line Junction Dimensions

#### In-Line Junction Plug Dimensions



#### In-Line Junction Receptacle Dimensions



# Triple Contact In-Line Junction

## SJS Plugs & Receptacles Size 16, 20

### Operating Range

#### Temperature:

-55°C to 155°C

#### Insulation Resistance:

5000 Megaohms Min.

#### Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

600 VRMS at 45,000 ft.

#### Vibration:

EIA-364D-028D, Test Condition V, E

#### Sealing:

EIA-364D-03B ( 55,000ft )

#### Flammability Rating:

UL94, V0

#### CTI Rating:

UL746B, 600V

#### Contact Retention:

EIA-364D-029B ( 20lb )

### Materials

#### Insulator Body:

Polyamide ( Nylon )

#### Grommet:

Silicone Rubber per A-A-59588

#### Contact Retainers:

Stainless Steel

## SJS In-Line Junctions



### Product Description

Two-piece environmentally sealed In-Line Junction designed to bring higher reliability, improved installation ease, and greater flexibility to wiring applications. Developed to meet MIL-T-81714 criteria, these in-line junctions consist of compact cylindrical plug and receptacle housing, which lock firmly together with a straight push and unlock with a simple "Squeeze and Pull" motion. The In-Line Junctions are keyed according to color and size and are available in three colors per size. Protective dust caps are also available. A panel mount version is currently in development.

### In-Line Junction Plugs

| Size | Part No.  | Length<br>inch cm | Diameter<br>inch cm | Mated Length<br>inch cm | Key | Color |
|------|-----------|-------------------|---------------------|-------------------------|-----|-------|
| 16   | SJS816100 | 1.12 2.84         | 0.70 1.78           | 1.60 4.10               | A   | Red   |
|      | SJS816110 |                   |                     |                         | B   | White |
|      | SJS816120 |                   |                     |                         | C   | Blue  |
| 20   | SJS820100 | 1.08 2.74         | 0.70 1.78           | 1.68 4.30               | A   | Red   |
|      | SJS820110 |                   |                     |                         | B   | White |
|      | SJS820120 |                   |                     |                         | C   | Blue  |

### In-Line Junction Receptacles

| Size | Part No.  | Length<br>inch cm | Diameter<br>inch cm | Mated Length<br>inch cm | Key | Color |
|------|-----------|-------------------|---------------------|-------------------------|-----|-------|
| 16   | SJS816200 | 1.03 2.61         | 0.70 1.78           | 1.60 4.10               | A   | Red   |
|      | SJS816210 |                   |                     |                         | B   | White |
|      | SJS816220 |                   |                     |                         | C   | Blue  |
| 20   | SJS820200 | 0.99 2.51         | 0.70 1.78           | 1.68 4.30               | A   | Red   |
|      | SJS820210 |                   |                     |                         | B   | White |
|      | SJS820220 |                   |                     |                         | C   | Blue  |

### In-Line Junction Contacts

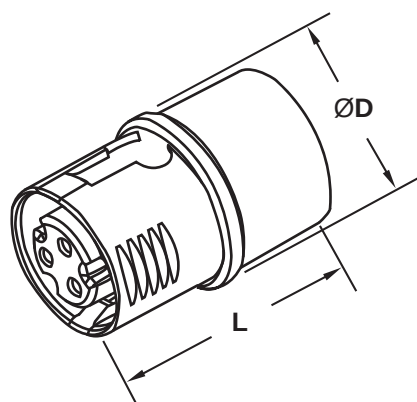
| In-Line Junction    | Contact                |
|---------------------|------------------------|
| Size 16 Plugs       | M39029/56-352 (socket) |
| Size 16 Receptacles | M39029/56-351 (socket) |
| Size 20 Plugs       | M39029/58-364 (pin)    |
| Size 20 Receptacles | M39029/58-363 (pin)    |

### In-Line Junction Weight

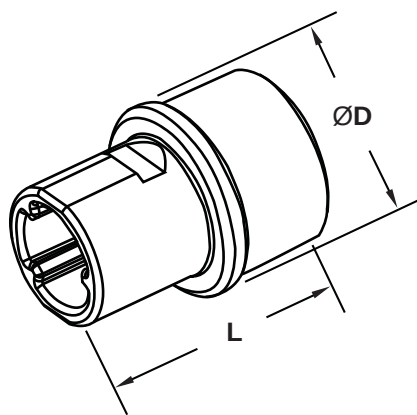
| In-Line Junction | Pounds | Grams |
|------------------|--------|-------|
| SJS816100        | .0116  | 5.30  |
| SJS816200        | .0095  | 4.30  |
| SJS820100        | .0101  | 4.60  |
| SJS820200        | .0081  | 3.70  |

### Relay Socket Dimensions

#### In-Line Junction Plug Dimensions



#### In-Line Junction Receptacle Dimensions



## High Performance Clamps



# High Performance P-Clamp

High Strength, Lightweight Wire & Tubing Clamps

### Materials

#### Clamp Base:

Polyetheretherketone (PEEK™)  
Per MIL-P-46183

#### Overmolding:

Silicone Rubber per ASTM-D-2000

### Performance

#### Temperature Limits:

Continuous: -54°C to 107°C  
Excursions: up to 177°C

#### Flammability:

UL94, V0

## Product Description

High Performance P-Clamps are designed to replace and outperform traditional clamps. Consisting of PEEK™ polymer and featuring and over-molded silicone cushion, these clamps are completely non-corrosive and non-conductive. These high performance clamps are designed to be lighter than traditional P-Clamps, are equipped with a locking feature to streamline installation, and are available in 15 different sizes. Alternate cushioning material available upon request including Fluorosilicone for fuel tank applications.

## P-Clamp Weight Chart

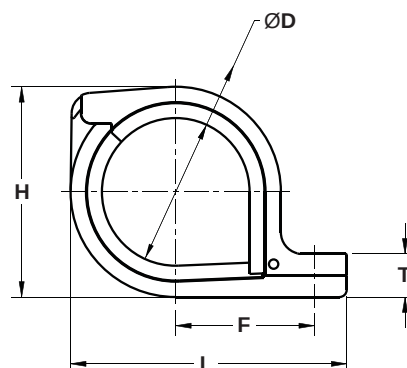
| APCD P/N  | Weight (lbs)<br>per 100 Clamps | Weight (grams)<br>per 100 Clamps |
|-----------|--------------------------------|----------------------------------|
| PCL150101 | 0.9                            | 408                              |
| PCL150102 | 1.1                            | 499                              |
| PCL150103 | 1.5                            | 681                              |
| PCL150104 | 1.7                            | 771                              |
| PCL150105 | 1.9                            | 862                              |
| PCL150106 | 2.1                            | 953                              |
| PCL150107 | 2.6                            | 1180                             |
| PCL150108 | 2.9                            | 1316                             |
| PCL150109 | 3.1                            | 1407                             |
| PCL150110 | 3.3                            | 1498                             |
| PCL150111 | 4.0                            | 1816                             |
| PCL150112 | 4.4                            | 1997                             |
| PCL150113 | 4.6                            | 2088                             |
| PCL150114 | 5.2                            | 2360                             |
| PCL150115 | 5.7                            | 2587                             |

## High Performance P-Clamps

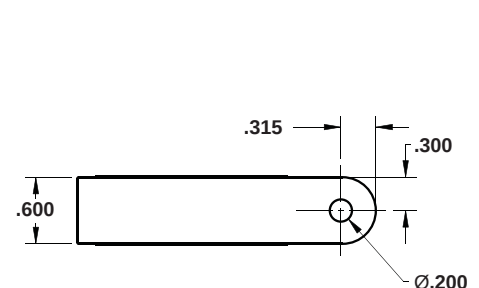
| Amphenol Pcd<br>Part Number | Diameter |      | F    |      | L    |      | H    |      | T    |      |
|-----------------------------|----------|------|------|------|------|------|------|------|------|------|
|                             | Inch     | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   |
| PCL150101                   | 0.12     | 0.32 | 0.59 | 1.51 | 1.18 | 2.99 | 0.64 | 1.62 | 0.18 | 0.46 |
| PCL150102                   | 0.22     | 0.56 | 0.64 | 1.63 | 1.27 | 3.22 | 0.71 | 1.80 | 0.18 | 0.46 |
| PCL150103                   | 0.31     | 0.79 | 0.71 | 1.81 | 1.41 | 3.59 | 0.82 | 2.07 | 0.24 | 0.61 |
| PCL150104                   | 0.41     | 1.03 | 0.76 | 1.93 | 1.51 | 3.83 | 0.88 | 2.25 | 0.24 | 0.61 |
| PCL150105                   | 0.50     | 1.27 | 0.81 | 2.05 | 1.60 | 4.07 | 0.92 | 2.33 | 0.24 | 0.61 |
| PCL150106                   | 0.59     | 1.51 | 0.85 | 2.17 | 1.69 | 4.31 | 1.05 | 2.68 | 0.24 | 0.61 |
| PCL150107                   | 0.69     | 1.75 | 0.93 | 2.35 | 1.84 | 4.67 | 1.20 | 3.05 | 0.30 | 0.76 |
| PCL150108                   | 0.78     | 1.99 | 0.97 | 2.47 | 1.93 | 4.91 | 1.32 | 3.35 | 0.30 | 0.76 |
| PCL150109                   | 0.88     | 2.22 | 1.02 | 2.59 | 2.03 | 5.15 | 1.39 | 3.53 | 0.30 | 0.76 |
| PCL150110                   | 0.97     | 2.46 | 1.07 | 2.71 | 2.12 | 5.38 | 1.48 | 3.76 | 0.30 | 0.76 |
| PCL150111                   | 1.06     | 2.70 | 1.14 | 2.89 | 2.26 | 5.75 | 1.62 | 4.12 | 0.36 | 0.91 |
| PCL150112                   | 1.16     | 2.94 | 1.18 | 3.01 | 2.36 | 5.99 | 1.75 | 4.46 | 0.36 | 0.91 |
| PCL150113                   | 1.25     | 3.18 | 1.23 | 3.13 | 2.45 | 6.23 | 1.82 | 4.63 | 0.36 | 0.91 |
| PCL150114                   | 1.34     | 3.41 | 1.29 | 3.28 | 2.57 | 6.54 | 1.93 | 4.91 | 0.40 | 1.00 |
| PCL150115                   | 1.44     | 3.65 | 1.35 | 3.43 | 2.69 | 6.83 | 2.05 | 5.20 | 0.42 | 1.07 |

## P-Clamp Dimensions

### Side View



### Bottom View



Amphenol Pcd

# High Performance Omega Clamp

## High Strength, Lightweight Wire & Tubing Clamps

### Materials

#### Clamp Base:

Polyetheretherketone (PEEK™)  
per MIL-P-46183

#### Overmolding:

Silicone Rubber per ASTM-D-2000

### Performance

#### Temperature Limits:

Continuous: -54°C to 107°C  
Excursions: up to 177°C

#### Flammability:

UL94, V0

## High Performance Clamps



## High Performance Omega Clamps

| Amphenol Pcd Part Number | Diameter |      | L    |      | F    |      | H    |      | C    |      | E    |      |
|--------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|
|                          | Inch     | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   |
| PCL250008                | 0.45     | 1.14 | 2.19 | 5.56 | 0.78 | 1.98 | 0.91 | 2.31 | 1.56 | 3.96 | 0.20 | 0.51 |
| PCL250009                | 0.51     | 1.30 | 2.25 | 5.72 | 0.81 | 2.06 | 0.97 | 2.46 | 1.62 | 4.11 | 0.20 | 0.51 |
| PCL250010                | 0.57     | 1.45 | 2.31 | 5.87 | 0.84 | 2.13 | 1.03 | 2.62 | 1.68 | 4.27 | 0.20 | 0.51 |
| PCL250011                | 0.63     | 1.60 | 2.42 | 6.15 | 0.89 | 2.26 | 1.14 | 2.90 | 1.79 | 4.55 | 0.25 | 0.64 |
| PCL250012                | 0.70     | 1.78 | 2.49 | 6.32 | 0.93 | 2.36 | 1.21 | 3.07 | 1.86 | 4.72 | 0.25 | 0.64 |
| PCL250013                | 0.77     | 1.96 | 2.56 | 6.50 | 0.96 | 2.44 | 1.28 | 3.25 | 1.93 | 4.90 | 0.25 | 0.64 |
| PCL250014                | 0.83     | 2.11 | 2.62 | 6.65 | 1.00 | 2.54 | 1.34 | 3.40 | 1.99 | 5.05 | 0.25 | 0.64 |
| PCL250015                | 0.89     | 2.26 | 2.68 | 6.81 | 1.03 | 2.62 | 1.40 | 3.56 | 2.05 | 5.21 | 0.25 | 0.64 |
| PCL250016                | 0.95     | 2.41 | 2.79 | 7.09 | 1.08 | 2.74 | 1.51 | 3.84 | 2.16 | 5.49 | 0.30 | 0.76 |
| PCL250017                | 1.01     | 2.57 | 2.85 | 7.24 | 1.11 | 2.82 | 1.57 | 3.99 | 2.22 | 5.64 | 0.30 | 0.76 |
| PCL250018                | 1.07     | 2.72 | 2.91 | 7.39 | 1.14 | 2.90 | 1.63 | 4.14 | 2.28 | 5.79 | 0.30 | 0.76 |
| PCL250019                | 1.13     | 2.87 | 2.97 | 7.54 | 1.17 | 2.97 | 1.69 | 4.29 | 2.34 | 5.94 | 0.30 | 0.76 |
| PCL250020                | 1.20     | 3.05 | 3.07 | 7.80 | 1.22 | 3.10 | 1.79 | 4.55 | 2.44 | 6.20 | 0.33 | 0.84 |
| PCL250021                | 1.26     | 3.20 | 3.10 | 7.87 | 1.24 | 3.15 | 1.82 | 4.62 | 2.47 | 6.27 | 0.30 | 0.76 |
| PCL250022                | 1.33     | 3.38 | 3.17 | 8.05 | 1.27 | 3.23 | 1.89 | 4.80 | 2.54 | 6.45 | 0.30 | 0.76 |
| PCL250023                | 1.39     | 3.53 | 3.23 | 8.20 | 1.30 | 3.30 | 1.95 | 4.95 | 2.60 | 6.60 | 0.30 | 0.76 |
| PCL250024                | 1.45     | 3.68 | 3.29 | 8.36 | 1.33 | 3.38 | 2.01 | 5.11 | 2.66 | 6.76 | 0.30 | 0.76 |
| PCL250025                | 1.51     | 3.84 | 3.35 | 8.51 | 1.36 | 3.45 | 2.07 | 5.26 | 2.72 | 6.91 | 0.30 | 0.76 |
| PCL250026                | 1.57     | 3.99 | 3.41 | 8.66 | 1.39 | 3.53 | 2.13 | 5.41 | 2.78 | 7.06 | 0.30 | 0.76 |
| PCL250032                | 1.95     | 4.95 | 3.82 | 9.70 | 1.60 | 4.06 | 2.54 | 6.45 | 3.19 | 8.10 | 0.33 | 0.84 |

## Product Description

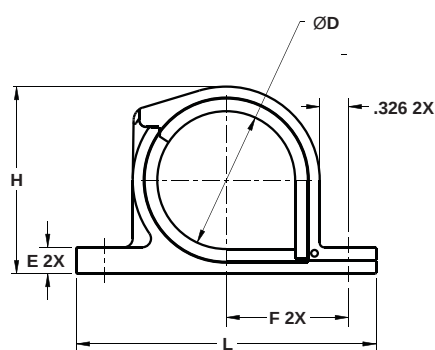
High Performance Omega Clamps are designed to replace and outperform traditional clamps. Consisting of PEEK™ polymer and featuring an over-molded silicone cushion, these clamps are completely non-corrosive and non-conductive. These high performance clamps are designed to be lighter than traditional Clamps, are equipped with a locking feature to streamline installation, and are available in 20 different sizes. Alternate cushioning material available upon request including Fluorosilicone for fuel tank applications.

## Omega Clamp Weight Chart

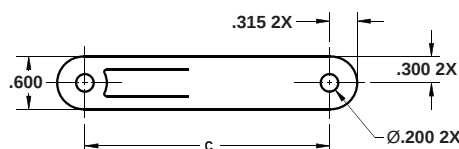
| APCD P/N  | Weight (lbs)<br>per 100 Clamps | Weight (grams)<br>per 100 Clamps |
|-----------|--------------------------------|----------------------------------|
| PCL250008 | 2.0                            | 907                              |
| PCL250009 | 2.1                            | 952                              |
| PCL250010 | 2.2                            | 997                              |
| PCL250011 | 2.9                            | 1315                             |
| PCL250012 | 3.0                            | 1360                             |
| PCL250013 | 3.2                            | 1451                             |
| PCL250014 | 3.3                            | 1496                             |
| PCL250015 | 3.4                            | 1542                             |
| PCL250016 | 4.2                            | 1905                             |
| PCL250017 | 4.4                            | 1995                             |
| PCL250018 | 4.5                            | 2041                             |
| PCL250019 | 4.7                            | 2131                             |
| PCL250020 | 5.3                            | 2404                             |
| PCL250021 | 5.0                            | 2268                             |
| PCL250022 | 5.2                            | 2358                             |
| PCL250023 | 5.3                            | 2404                             |
| PCL250024 | 5.4                            | 2449                             |
| PCL250025 | 5.6                            | 2540                             |
| PCL250026 | 5.7                            | 2585                             |
| PCL250032 | 7.3                            | 3311                             |

## P-Clamp Dimensions

Side View



Bottom View



# Amphenol Pcd

## Power Distribution Bus



## Power Bus 3

### Power Distribution Bus

#### Materials

##### Module Body:

Polyetherimide  
per ASTM-D5205

##### Color:

Gray

##### Socket Contact Retainers:

Beryllium Copper

##### Bus Bar and Pin Contacts:

Copper, Nickel Plated per  
SAE-AMS-QQ-N-29C, Class I

##### Marking:

High Temperature epoxy ink  
(Colors Optional)

#### Operating Range

##### Temperature:

-55°C to 80°C

##### Voltage:

1000 Volts AC RMS Max

##### Current:

73 Amps Max

##### Vibration:

MIL-STD-202, Method 204,  
Test Condition D

##### Shock:

MIL-STD-202, Method 213,  
Test Condition K  
Fluid

#### Operating Range (cont.)

##### Thermal Shock:

MIL-STD-202, Method 107,  
Test Condition B

##### Salt Spray:

MIL-STD-202, Method 101,  
Test Condition B

##### Humidity:

MIL-STD-202, Method 106  
(No Vibration Step 7B)

##### Contact Retention:

16 ga. Contact = 30 lbs Min.  
8 ga. Contact = 55 lbs Min.

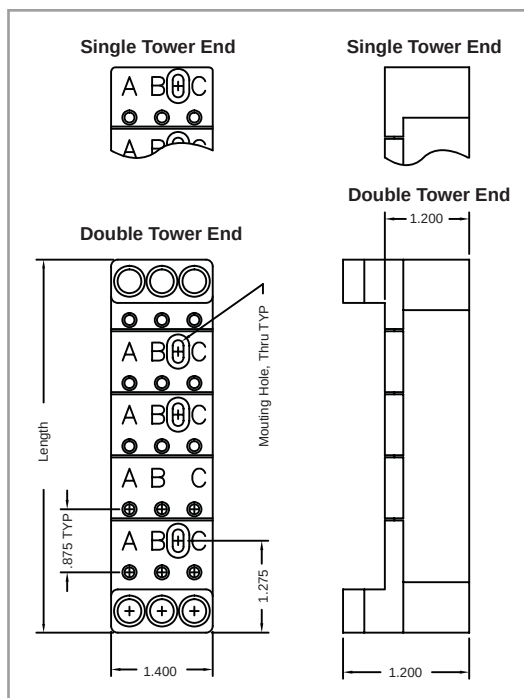
##### Fluid Immersion:

Materials and Marking Shall Be  
Resistant to Skydrol LD-4 and  
MIL-H-83282 Hydraulic

### Product Description

Power Bus 3 is a lightweight, compact and fully enclosed 3-phase, 73 amp, 1000 VAC power distribution bus for aircraft and other applications. The unique Power Bus 3 provides significant advantages in terms of size and weight reduction and strength increases over existing power bus devices. The construction features a rigid extruded polyetherimide channel that contains and isolates the three bus phases in individual chambers. Stackable modular sections are welded ultrasonically to the extrusion to build the Power bus 3 to any desired length.

### Power Bus Dimensions



### Amphenol Pcd Power Bus

#### Single Tower End

| Output Sets | APCD P/N  | Length |
|-------------|-----------|--------|
| 5           | SSM300105 | 4.300  |
| 6           | SSM300106 | 5.175  |
| 7           | SSM300107 | 6.050  |
| 9           | SSM300108 | 6.925  |
| 9           | SSM300109 | 7.800  |
| 10          | SSM300110 | 8.675  |
| 11          | SSM300111 | 9.550  |
| 12          | SSM300112 | 10.425 |
| 13          | SSM300113 | 11.300 |
| 14          | SSM300114 | 12.175 |
| 15          | SSM300115 | 13.050 |
| 16          | SSM300116 | 13.925 |
| 17          | SSM300117 | 14.800 |
| 18          | SSM300118 | 15.675 |
| 19          | SSM300119 | 16.550 |
| 20          | SSM300120 | 17.425 |
| 21          | SSM300121 | 18.300 |
| 22          | SSM300122 | 19.175 |
| 23          | SSM300123 | 20.050 |
| 24          | SSM300124 | 20.925 |
| 25          | SSM300125 | 21.800 |
| 26          | SSM300126 | 22.675 |
| 27          | SSM300127 | 23.550 |
| 28          | SSM300128 | 24.425 |
| 29          | SSM300129 | 25.300 |
| 30          | SSM300130 | 26.175 |
| 31          | SSM300131 | 27.050 |
| 32          | SSM300132 | 27.925 |
| 33          | SSM300133 | 28.800 |
| 34          | SSM300134 | 29.675 |
| 35          | SSM300135 | 30.550 |
| 36          | SSM300136 | 31.425 |

#### Double Tower End

| Output Sets | APCD P/N  | Length  |
|-------------|-----------|---------|
| 5           | SSM300205 | 5.175   |
| 6           | SSM300206 | 6.050   |
| 7           | SSM300207 | 6.925   |
| 9           | SSM300208 | 7.800   |
| 9           | SSM300209 | 8.675   |
| 10          | SSM300210 | 9.550   |
| 11          | SSM300211 | 10.425  |
| 12          | SSM300212 | 11.300  |
| 13          | SSM300213 | 12.175  |
| 14          | SSM300214 | 13.050  |
| 15          | SSM300215 | 13.925  |
| 16          | SSM300216 | 14.800  |
| 17          | SSM300217 | 15.675  |
| 18          | SSM300218 | 16.550  |
| 19          | SSM300219 | 17.425  |
| 20          | SSM300220 | 18.300  |
| 21          | SSM300221 | 1*9.175 |
| 22          | SSM300222 | 20.050  |
| 23          | SSM300223 | 20.925  |
| 24          | SSM300224 | 21.800  |
| 25          | SSM300225 | 22.675  |
| 26          | SSM300226 | 23.550  |
| 27          | SSM300227 | 24.425  |
| 28          | SSM300228 | 25.300  |
| 29          | SSM300229 | 26.175  |
| 30          | SSM300230 | 27.050  |
| 31          | SSM300231 | 27.925  |
| 32          | SSM300232 | 28.800  |
| 33          | SSM300233 | 29.675  |
| 34          | SSM300234 | 30.550  |
| 35          | SSM300235 | 31.425  |
| 36          | SSM300236 | 32.300  |

# Crimp Removable Socket Contacts

## MIL-C-39029/5, MIL-C-39029/101

### Materials:

#### Body:

Copper Alloy, Hard Gold  
Plated per MIL-G-45204

#### Hood:

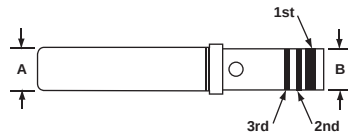
Stainless Steel Passivated

### Performance:

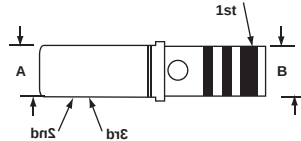
#### Performance:

Performance in Accord with  
SAE-AS39209 and Related  
Specifications

M39029/5 Contact Dimensions



M39029/5 Contact Dimensions



### Contacts



### Contacts By Relay Socket

**M39029/5** Contacts Used with  
M12883/40, /41, /47, & /48 Relay Sockets

**M39029/101** Contacts Used with  
M12883/44, /45, /46, & /52 Relay Sockets

### Contact Design Characteristics

| Bin Code            | Military P/N   | APCD P/N  | Pin Size | Wire Size | 1st         | 2nd   | 3rd    | A (Max) | B (Max) |
|---------------------|----------------|-----------|----------|-----------|-------------|-------|--------|---------|---------|
| M39029/5 Contacts   |                |           |          |           | Color Bands |       |        |         |         |
| 115                 | M39029/5-115   | CNS511500 | 20       | 20        | Brown       | Brown | Green  | .078    | .078    |
| 116                 | M39029/5-116   | CNS511600 | 16       | 16        | Brown       | Brown | Blue   | .113    | .103    |
| 117                 | M39029/5-117   | CNS511700 | 16       | 20        | Brown       | Brown | Violet | .113    | .078    |
| 118                 | M39029/5-118   | CNS511800 | 12       | 12        | Brown       | Brown | Gray   | .161    | .151    |
| 119                 | M39029/5-119   | CNS511900 | 12       | 16        | Brown       | Brown | White  | .161    | .103    |
| M39029/101 Contacts |                |           |          |           | Color Bands |       |        |         |         |
| 551                 | M39029/101-551 | CNS101551 | 22       | 28        | Green       | Green | Brown  | .060    | .048    |
| 552                 | M39029/101-552 | CNS101552 | 22       | 22        | Green       | Green | Red    | .060    | .048    |
| 553                 | M39029/101-553 | CNS101553 | 20       | 20        | Green       | Green | Orange | .076    | .070    |
| 554                 | M39029/101-554 | CNS101554 | 16       | 16        | Green       | Green | Yellow | .108    | .103    |

### Contact Installation Tooling

| Bin Code            | Basic Crimping Tool                     | Positioner                                   | Installing Tool | Wired Contact Removal Tool |
|---------------------|-----------------------------------------|----------------------------------------------|-----------------|----------------------------|
| M39029/5 Contacts   |                                         |                                              |                 |                            |
| 115                 | M22520/2-01, M22520/1-01 or M22520/7-01 | M22520/2-02, M22520/1-02 Red, or M22520/7-02 | M81969/14-02    | M81969/14-02               |
| 116                 | M22520/1-01, M22520/7-01                | M22520/1-02 Blue or M22520/7-03              | M81969/14-03    | M81969/14-03               |
| 117                 | M22520/1-01, M22520/7-01                | M22520/1-02 Blue or M22520/7-03              | M81969/14-02    | M81969/14-02               |
| 118                 | M22520/1-01                             | M22520/1-02 Yellow                           | M81969/14-04    | M81969/14-04               |
| 119                 | M22520/1-01                             | M22520/1-02 Yellow                           | M81969/14-03    | M81969/14-03               |
| M39029/101 Contacts |                                         |                                              |                 |                            |
| 551                 | M22520/7-01                             | M81969/7-11                                  | M81969/16-04    | M81969/16-04               |
| 552                 | M22520/7-01                             | M22520/7-11                                  | M81969/16-04    | M81969/16-04               |
| 553                 | M22520/7-01                             | M22520/7-12                                  | M81969/16-01    | M81969/16-01               |
| 554                 | M22520/7-01                             | M22520/7-13                                  | M81969/16-03    | M81969/16-02               |

# Amphenol Pcd

## Contacts



### Contacts By Relay Socket

**M39029/1** Contacts Used with M81714 Series I, TJE, TJSE, TJHD, and TJM Modules

**M39029/22** Contacts Used with M81714/60, /61, /63, Series II Socket Junction Modules

# Crimp Removable Contacts

## MIL-C-39029/1, MIL-C-39029/22

### Materials:

#### Body:

Copper Alloy, Hard Gold Plated per MIL-G-45204

#### Hood:

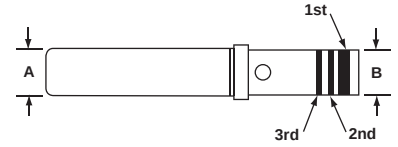
Stainless Steel Passivated

### Performance:

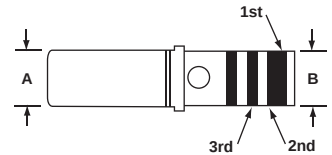
#### Performance:

Performance in Accord with SAE-AS39209 and Related Specifications

### M39029/1 Contact Dimensions



### M39029/22 Contact Dimensions



## Contact Design Characteristics

| Bin Code                  | Military P/N  | APCD P/N  | Pin Size | Wire Size | 1st                | 2nd   | 3rd    | A (Max) | B (Max) |
|---------------------------|---------------|-----------|----------|-----------|--------------------|-------|--------|---------|---------|
| <b>M39029/1 Contacts</b>  |               |           |          |           | <b>Color Bands</b> |       |        |         |         |
| 100                       | M39029/1-100  | CNS068000 | 16       | 22        | Brown              | Black | Black  | .062    | .051    |
| 101                       | M39029/1-101  | CNS060000 | 16       | 20        | Brown              | Black | Brown  | .063    | .078    |
| 102                       | M39029/1-102  | CNS037000 | 14       | 16        | Brown              | Black | Red    | .078    | .105    |
| 103                       | M39029/1-103  | CNS072000 | 12       | 12        | Brown              | Black | Orange | .095    | .153    |
| 507                       | M39029/1-507  | CNS022507 | 20       | 22D       | Green              | Black | Violet | .041    | .048    |
| <b>M39029/22 Contacts</b> |               |           |          |           | <b>Color Bands</b> |       |        |         |         |
| 191                       | M39029/22-191 | CNS113900 | 22       | 22        | Brown              | White | Brown  | .060    | .048    |
| 192                       | M39029/22-192 | CNS070900 | 20       | 20        | Brown              | White | Red    | .076    | .070    |
| 193                       | M39029/22-193 | CNS072900 | 16       | 16        | Brown              | White | Orange | .108    | .103    |
| 605                       | M39029/22-605 | CNS123900 | 12       | 12        | Blue               | Black | Green  | .168    | .152    |

## Contact Installation Tooling

| Bin Code                  | Basic Crimping Tool      | Positioner                   | Installing Tool                         | Wired Contact Removal Tool              |
|---------------------------|--------------------------|------------------------------|-----------------------------------------|-----------------------------------------|
| <b>M39029/1 Contacts</b>  |                          |                              |                                         |                                         |
| 100                       | M22520/2-01              | M22520/2-11                  | M81969/14-02                            | M81969/14-02                            |
| 101                       | M22520/1-01, M22520/2-01 | M22520/1-02 Red, M22520/2-11 | M81969/14-02                            | M81969/14-02                            |
| 102                       | M22520/1-01              | M22520/1-02 Blue             | M81969/14-03                            | M81969/14-03                            |
| 103                       | M22520/1-01              | M22520/1-02 Yellow           | M81969/14-04                            | M81969/14-04                            |
| 507                       | M22520/2-01              | M22520/2-32                  | M81969/14-01, or/1-04 or /8-01 or /8-02 | M81969/14-01, or/1-04 or /8-01 or /8-02 |
| <b>M39029/22 Contacts</b> |                          |                              |                                         |                                         |
| 191                       | M22520/7-01              | M81969/7-11                  | M81969/14-01                            | M81969/14-01                            |
| 192                       | M22520/7-01              | M22520/7-12                  | M81969/14-10                            | M81969/14-10                            |
| 193                       | M22520/7-01              | M22520/7-13                  | M81969/14-03                            | M81969/14-03                            |
| 605                       | M22520/1-01              | Daniels, TH343 or TP405      | M81969/16-03                            | M81969/16-03                            |

# Crimp Removable Socket Contacts

## MIL-C-39029/92

### Materials:

#### Body:

Copper Alloy, Hard Gold  
Plated per MIL-G-45204

#### Hood:

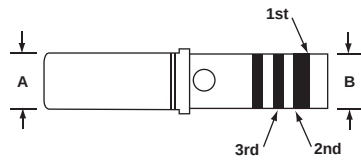
Stainless Steel Passivated

### Performance:

#### Performance:

Performance in Accord with  
MIL-C-39209 and Related  
Specifications

M39029/92 Contact Dimensions



## Contacts



### Contacts By Relay Socket

**M39029/92** Contacts Used with  
M12883/40, /41, /47, /48, /54, /55 Relay Sockets

## Contact Design Characteristics

| Bin Code                  | Military P/N   | APCD P/N  | Pin Size | Wire Size | 1st   | 2nd    | 3rd    | A (Max) | B (Max) |
|---------------------------|----------------|-----------|----------|-----------|-------|--------|--------|---------|---------|
| <b>M39029/92 Contacts</b> |                |           |          |           |       |        |        |         |         |
| 531                       | M392029/92-531 | CNS115900 | 22       | 22        | Green | Orange | Brown  | .062    | .053    |
| 532                       | M392029/92-532 | CNS074900 | 20       | 20        | Green | Orange | Red    | .078    | .078    |
| 533                       | M392029/92-533 | CNS126900 | 16       | 16        | Green | Orange | Orange | .113    | .103    |
| 534                       | M392029/92-534 | CNS127900 | 16       | 20        | Green | Orange | Yellow | .113    | .078    |
| 535                       | M392029/92-535 | CNS128900 | 12       | 12        | Green | Orange | Green  | .161    | .151    |
| 536                       | M392029/92-536 | CNS129900 | 12       | 16        | Green | Orange | Blue   | .161    | .103    |

## Contact Installation Tooling

| Bin Code                  | Basic Crimping Tool                   | Positioner                                | Installing Tool     | Wired Contact Removal Tool |
|---------------------------|---------------------------------------|-------------------------------------------|---------------------|----------------------------|
| <b>M39029/92 Contacts</b> |                                       |                                           |                     |                            |
| 531                       | M22520/2-01                           | Daniels K1561                             | M81969/8-03, /14-01 | M81969/8-04, /14-01        |
| 532                       | M22520/1-01, M22520/2-01, M22520/7-01 | M22520/1-02 Red, M22520/2-02, M22520/7-02 | M81969/8-05, /14-02 | M81969/8-06, /14-02        |
| 533                       | M22520/1-01 or M22520/7-01            | M22520/1-02 Blue or M22520/7-03           | M81969/8-07, /14-03 | M81969/8-08, /14-03        |
| 534                       | M22520/1-01 or M22520/7-01            | M22520/1-02 Blue or M22520/7-03           | M81969/8-07, /14-03 | M81969/8-08, /14-03        |
| 535                       | M22520/1-01                           | M22520/1-02 Yellow                        | M81969/8-09, /14-04 | M81969/8-10, /14-04        |
| 536                       | M22520/1-01                           | M22520/1-02 Yellow                        | M81969/8-09, /14-04 | M81969/8-10, /14-04        |