

### MIL-PRF81714 Series I Junction Modules

QPL approved modules (MIL-PRF-81714 and MIL-C-39029/1 contacts) are available in four standard sizes accommodating 12-26 AWG wire in both feed-back and feed-thru types with a full selection of bussing arrangements. The complete MIL-PRF-81714 Series I terminal junction system includes the following elements.

- Feedback Modules
- Feedthru Modules
- Ground Modules
- Electronic Modules
- Single In-Line Splices
- Dual In-Line Splices
- Electronic Splices
- Mounting Tracks
- Mil-C-39029/1 Contacts

### Module Design and Construction

The patented PCD terminal junction module design assures maximum efficiency and reliability. Key features and benefits include:

#### ▪ Integral Socket/Bus Bar

The Patented integral socket/bus bar assembly provides superior electrical characteristics and assures mechanical integrity over a long product life. This unique design totally eliminates all solder of welded joints, which could cause variations 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 a highly conductive alloy for optimum electrical performance. Separate and independent BeCu pressure springs designated for maximum mechanical performance, provide consistent contact pressure.

#### ▪ 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.

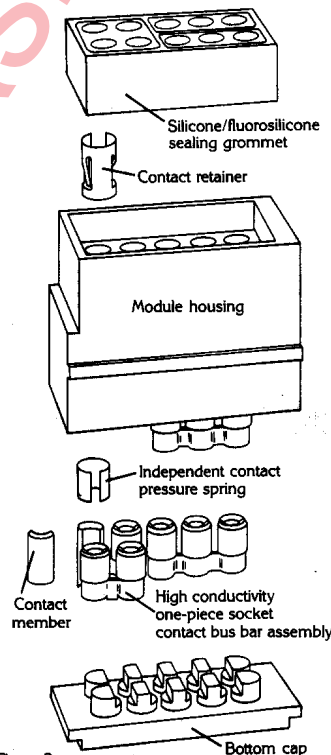
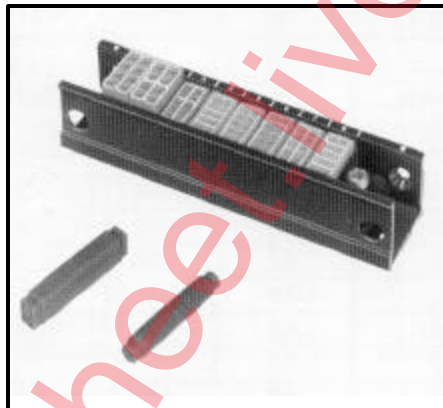


Figure 2.

### High Density Modules

A recently introduced series of high density modules which conform to all dimensional and performance requirements of MIL-PRF-81714/17 is now available from PCD and indicated on page 45.

The high density modules accept 21 size 22 contacts in a compact 3 X 7 configuration, with a wide variety of bus arrangements. The construction features one-piece screw machine contacts with a split socket design for a maximum performance. Contacts are securely packaged within a polyetherimide housing.

### Switch Connectors

MIL-PRF-81714 and related technology have been utilized to develop a broad and growing family of specialty connectors and pluggable switches, remote control circuit breakers (RCCB), and other applications where reliable plug-in or removal capability is required for a system component. Wire termination capabilities include crimp contacts and solder tabs. Product includes both standard and engineered connectors. Contact PCD for details.

### Class D Module System

PCD was the first supplier to qualify module and track systems to the high performance MIL-PRF-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 – and also meet random vibration standards. Class D modules replace obsolete Classes A, B and C.

# Military Qualified, QPL-Listed Terminal Junctions



## Mil-T-81714

Military Number	PCD Number	Military Number	PCD Number	Military Number	PCD Number
M81714/1-DA1	TJM122701	M81714/6-DB1	TJM222702	M81714/16-2	TJT703003
M81714/1-DB1	TJM122702	M81714/6-DB2	TJM222703	M81714/16-3	TJT703004
M81714/1-DB2	TJM120703	M81714/6-DB3	TJM222704	M81714/16-4	TJT703005
M81714/1-DB3	TJM120704	M81714/6-DC1	TJM222705	M81714/16-5	TJT703006
M81714/1-DC1	TJM120705	M81714/6-DC2	TJM222706	M81714/16-6	TJT703007
M81714/1-DC2	TJM122706	M81714/6-DD1	TJM222707	M81714/16-7	TJT703008
M81714/1-DC3	TJM122710	M81714/6-DE1	TJM222708	M81714/16-8	TJT703009
M81714/1-DC4	TJM122712	M81714/6-DJ1	TJM222709	M81714/16-9	TJT703011
M81714/1-DD1	TJM122707	M81714/7-DA1	TJM220701	M81714/16-10	TJT703012
M81714/1-DD2	TJM122711	M81714/7-DB1	TJM220702	M81714/16-11	TJT703013
M81714/1-DE1	TJM122708	M81714/7-DB2	TJM220703	M81714/16-12	TJT703014
M81714/2-DA1	TJM120701	M81714/7-DB3	TJM220704	M81714/16-13	TJT703015
M81714/2-DB1	TJM120702	M81714/7-DC1	TJM220705	M81714/17-D30	TJHD22700
M81714/2-DB2	TJM120703	M81714/7-DC2	TJM220706	M81714/17-D31	TJHD22701
M81714/2-DB3	TJM120704	M81714/7-DD1	TJM220707	M81714/17-D32	TJHD22702
M81714/2-DC1	TJM120705	M81714/7-DE1	TJM220708	M81714/17-D33	TJHD22703
M81714/2-DC2	TJM120706	M81714/7-DJ1	TJM220709	M81714/17-D34	TJHD22704
M81714/2-DC3	TJM120710	M81714/8-DA1	TJM216701	M81714/17-D35	TJHD22705
M81714/2-DC4	TJM120712	M81714/8-DB1	TJM216702	M81714/17-D36	TJHD22706
M81714/2-DD1	TJM120707	M81714/8-DB2	TJM216703	M81714/17-D37	TJHD22707
M81714/2-DD2	TJM120711	M81714/8-DC1	TJM216705	M81714/17-D38	TJHD22708
M81714/2-DE1	TJM120708	M81714/8-DC2	TJM216706	M81714/17-D39	TJHD22709
M81714/3-DA1	TJM116701	M81714/8-DD1	TJM216707	M81714/17-D40	TJHD22710
M81714/3-DB1	TJM116702	M81714/8-DG1	TJM216708	M81714/17-D42	TJHD22712
M81714/3-DB2	TJM116703	M81714/8-DH1	TJM216709	M81714/17-D43	TJHD22713
M81714/3-DC1	TJM116705	M81714/10-1	TJT702002	M81714/17-D44	TJHD22714
M81714/3-DC2	TJM116706	M81714/10-2	TJT702003	M81714/17-D45	TJHD22715
M81714/3-DD1	TJM116707	M81714/10-3	TJT702004	M81714/60-12-01	SJM012100
M81714/5-1	TJT701010	M81714/10-4	TJT702005	M81714/60-12-02	SJM012200
M81714/5-2	TJT701003	M81714/10-5	TJT702006	M81714/60-12-03	SJM012300
M81714/5-3	TJT701004	M81714/10-6	TJT702007	M81714/60-16-01	SJM016100
M81714/5-4	TJT701005	M81714/10-7	TJT702008	M81714/60-16-02	SJM016200
M81714/5-5	TJT701006	M81714/10-8	TJT702009	M81714/60-16-03	SJM016300
M81714/5-6	TJT701007	M81714/11-20D	TJS320700	M81714/60-20-01	SJM020100
M81714/5-7	TJT701008	M81714/11-22D	TJS322700	M81714/60-20-02	SJM020200
M81714/5-8	TJT701009	M81714/12-20D-1	TJS320701	M81714/60-20-03	SJM020300
M81714/5-9	TJT701011	M81714/12-20D-2	TJS320702	M81714/60-20-04	SJM020400
M81714/5-10	TJT701012	M81714/12-22D-1	TJS322701	M81714/60-20-06	SJM020600
M81714/5-11	TJT701013	M81714/12-22D-2	TJS322702	M81714/60-22-01	SJM022100
M81714/5-12	TJT701014	M81714/12-16D-1	TJS316701	M81714/60-22-02	SJM022200
M81714/5-13	TJT701015	M81714/12-16D-2	TJS316702	M81714/60-22-04	SJM022400
M81714/6-DA1	TJM222701	M81714/16-1	TJT703010	M81714/60-22-05	SJM022500

**Flame Enterprises is the Leader in Relay Socket Distribution  
Put our Incredible Inventory of PCD Sockets to Work for You**

## *Military Qualified, QPL-Listed Terminal Junctions (cont.)*

<b>Military Number</b>	<b>PCD Number</b>	<b>Military Number</b>	<b>PCD Number</b>	<b>Military Number</b>	<b>PCD Number</b>
M81714/60-22-06	SJM022600	M81714/67-02	SJT502404	M81714/67-16	SJT516404
M81714/60-22-10	SJM022700	M81714/67-03	SJT503404	M81714/67-18	SJT518404
M81714/61-0Z	SJM000100	M81714/67-04	SJT504404	M81714/67-19	SJT519404
M81714/61-0Y	SJM000800	M81714/67-05	SJT505404	M81714/67-20	SJT520404
M81714/61-0X	SJM000200	M81714/67-06	SJT506404	M81714/67-21	SJT521404
M81714/61-0W	SJM000500	M81714/67-07	SJT507404	M81714/67-25	SJT525404
M81714/63-12F	SJG012270	M81714/67-08	SJT508404	M81714/67-30	SJT530404
M81714/63-16F	SJG016270	M81714/67-09	SJT509404	M81714/67-32	SJT532404
M81714/63-16S	SJG016170	M81714/67-10	SJT510404	M81714/67-40	SJT540404
M81714/63-20F	SJG020270	M81714/67-12	SJT512404	M81714/69-01	CNA051300
M81714/63-20S	SJG020170	M81714/67-13	SJT513404	M81714/69-02	CNA052300
M81714/63-22F	SJG022270	M81714/67-14	SJT514404		
M81714/63-22S	SJG022170	M81714/67-15	SJT515404		

**Flame Enterprises is the Leader in Relay Socket Distribution  
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#### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Socket Contacts:** Copper alloy, gold plated in accordance with MIL-G-45204

#### Operating Range:

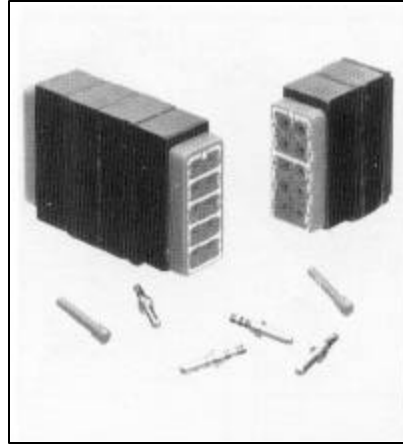
**Temperature:** -65°C to 200°C

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

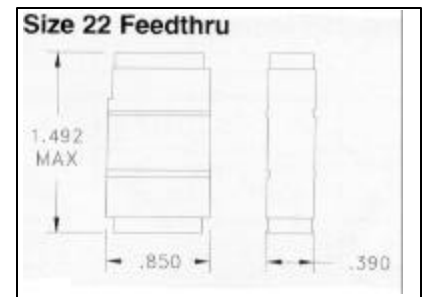
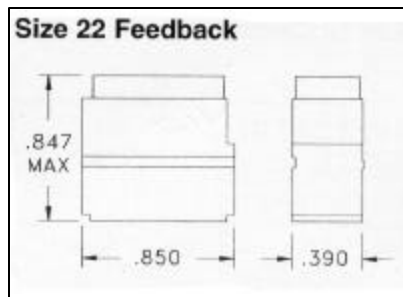
**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 100,000 ft.

**Current Rating:** 5 Amps

**Vibration and Shock:** MIL-T-81714 Paragraph 3.5.5 and 3.5.8



- **High Reliability**
- **High Temperature**
- **High Fluid Resistance**
- **Feedback and Feedthru**
- **Accepts 16, 18, 20 AWG**



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

\*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.

\*\*Mating Pin/Wire Barrel

#### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Socket Contacts:** Copper alloy, gold plated in accordance with MIL-G-45204

#### Operating Range:

**Temperature:** -65°C to 200°C

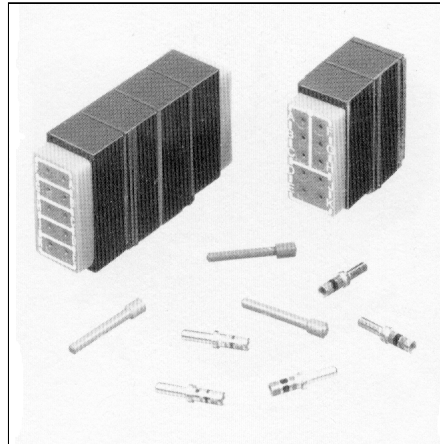
**Insulation Resistance:** 5000 megohms @ 25°C

#### Dielectric Withstanding

**Voltage:** 1500 VRMS at sea level and 200 VRMS at 100,000 ft.

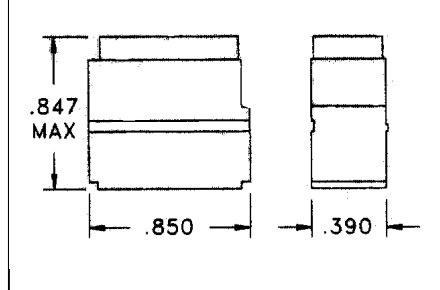
**Current Rating:** 7.5 Amps

**Vibration and Shock:** MIL-T-81714 Paragraph 3.5.5 and 3.5.8

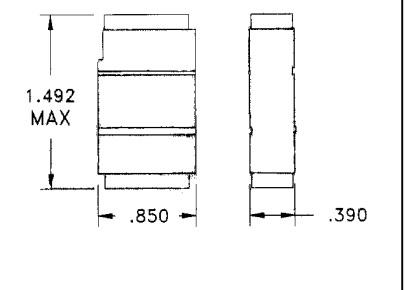


- High Reliability
- High Temperature
- High Fluid Resistance
- Feedback and Feedthru
- Accepts 20, 22, 24 AWG

Size 20 Feedback



Size 20 Feedthru



Bussing Configuration	Feedback		Feedthru		Contact		
	Military P/N	PCD P/N	Military P/N	PCD P/N	Qty*	Size**	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.

\*\*Mating Pin/Wire Barrel

#### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Socket Contacts:** Copper alloy, gold plated in accordance with MIL-G-45204

#### Operating Range:

**Temperature:** -65°C to 200°C

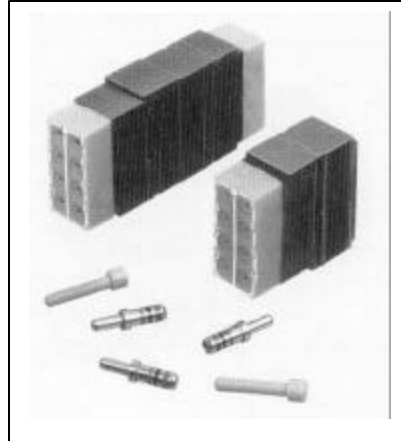
**Insulation Resistance:** 5000 megohms @ 25°C

#### Dielectric Withstanding

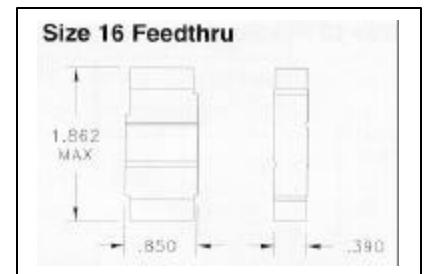
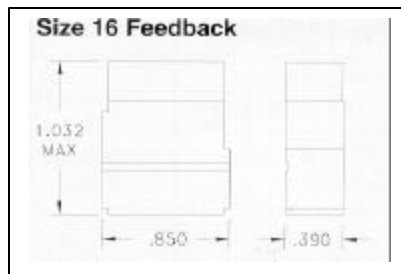
**Voltage:** 1500 VRMS at sea level and 200 VRMS at 100,000 ft.

**Current Rating:** 13 Amps

**Vibration and Shock:** MIL-T-81714 Paragraph 3.5.5 and 3.5.8



- **High Reliability**
- **High Temperature**
- **High Fluid Resistance**
- **Feedback and Feed-thru**
- **Accepts 16, 18, 20 AWG**



Bussing Configuration	Feedback		Feedthru		Contact		
	Military P/N	PCD P/N	Military P/N	PCD P/N	Qty*	Size**	P/N M39029
	M81714/2-DA1	TJM120701	M81714/7-DA1	TJM220701	10	16/20	/1-102
	M81714/2-DB1	TJM120702	M81714/7-DB1	TJM220702	10	16/20	/1-102
	M81714/2-DB2	TJM120703	M81714/7-DB2	TJM220703	10	16/20	/1-102
	M81714/2-DB3	TJM120704	M81714/7-DB3	TJM220704	10	16/20	/1-102
	M81714/2-DC1	TJM120705	M81714/7-DC1	TJM220705	10	16/20	/1-102
	M81714/2-DC2	TJM120706	M81714/7-DC2	TJM220706	10	16/20	/1-102
	M81714/2-DC3	TJM120710			10	16/20	/1-102
	M81714/2-DC4	TJM120712			10	16/20	/1-102

\*Contact quantity for feed-thru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug.

\*\*Mating Pin/Wire Barrel



# Terminal Junction Modules

## High Density M81714/17\* Series

Class D

Size 22D

### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Socket Contacts:** Copper alloy, gold plated in accordance with MIL-G-45204

### Operating Range:

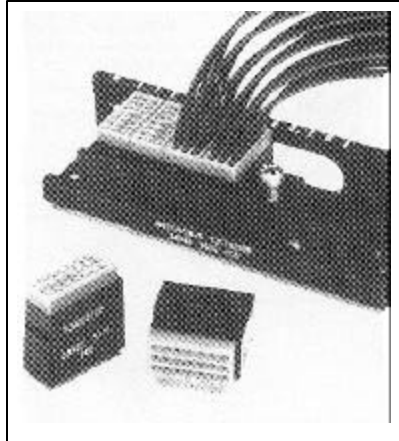
**Temperature:** -65°C to 200°C

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

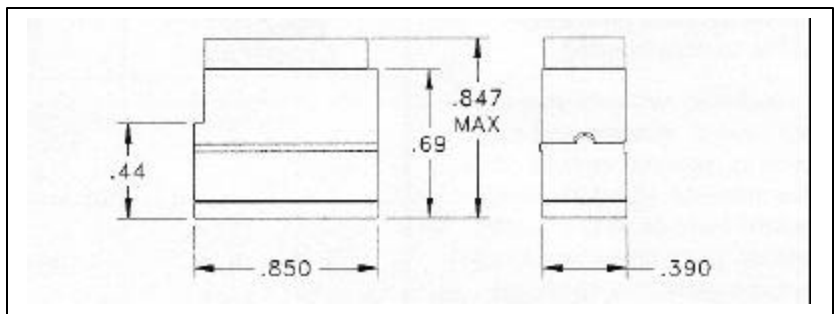
**Dielectric Withstanding Voltage:** 1000 VRMS at sea level and 200 VRMS at 110,000 ft.

**Current Rating:** 5 Amps

**Vibration and Shock:** MIL-T-81714 Paragraph 3.5.5 and 3.5.8



- High Density
- High Reliability
- High Temperature
- High Fluid Resistance
- Accepts 22 & 26 AWG



Bussing Configuration	Military P/N *M81714	PCD P/N	Bussing Configuration	Military P/N *M81714	PCD P/N
	/17-D30	TJHD22700		/17-D38	TJHD22708
	/17-D31	TJHD22701		/17-D39	TJHD22709
	/17-D32	TJHD22702		/17-D40	TJHD22710
	/17-D33	TJHD22703		/17-D42	TJHD22712
	/17-D34	TJHD22704		/17-D43	TJHD22713
	/17-D35	TJHD22705		/17-D44	TJHD22714
	/17-D36	TJHD22706		/17-D45	TJHD22715
	/17-D37	TJHD22707			

\*Contacts supplied: M39029/1-507 Qty 22

\*QPL Pending



# Terminal Electronic Component Modules

## Confirm to MIL-T-81714/26

Class D

Electronic terminal junction modules meet all dimensional and performance requirements of MIL-T-81714/26 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 and resistors, which usually take up valuable real estate elsewhere in the system, to be securely packaged within the module housing.

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 is available, and modules can be customized to meet specific customer designs.

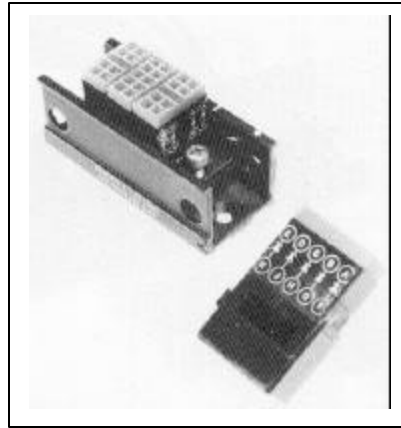
### Materials:

**Module Body:** Polyetherimide

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Socket Contacts:** Copper alloy, gold plated in accordance with MIL-G-45204



- **Accepts electronic components**
- **Standard or Custom Configurations**
- **Meets MIL-T-81714**
- **Rugged Construction**

Circuit Diagram	PCD P/N	Diode P/N	Qty
	TJE120810	JANTXIN5552	5
	TJE120811	JANTXIN5552	4
	TJE120815	IN4005	2
	TJE120998	BYW56	2
	TJE120999	BYW56	2

### Operating Range:

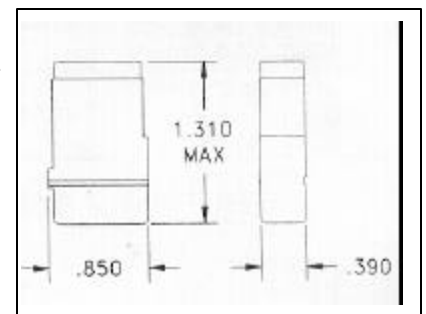
Temperature: -65° to 200°C\*

Insulation Resistance: 5000 megohms min @ 25°C\*

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 100,000 ft. altitude\*

**Current Rating:** 7.5 amps\*

**Vibration and Shock:** Per MIL-T-81714 Paragraph 3.5.8 and 3.5.9





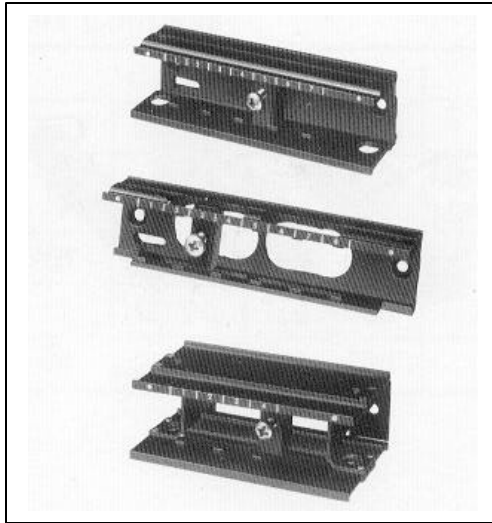


# Terminal Junction Mounting Tracks

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

Class D

- Enhanced Class D Vibration Performance
- Standard and Lightweight
- Feedback and Feedthru



PCD offers feedback and feedthru mounting tracks, as well as a lightweight feedback type with weight reduction cut-outs per MIL-T-81714/16 for weight critical applications.

One track holds all module sizes; size 22, 20 and 16 modules require one mounting space; size 12 requires three.

Each track unit consists of an aluminum alloy track and locking clamp black anodized per MIL-A-8625. The stainless steel clamp screw is self locking to meet vibrations, shock and temperature variation requirements.

Feedback Mounting Tracks	Standard		Lightweight		Mtg. Pos*	Dimensions	
	Mil P/N	PCD P/N	MIL P/N	PCD P/N		A	B
	M81714/5-1	TJT701010	M81714/16-1	TJT703010	10	5.29	4.79
	NONE	TJT701002	NONE	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
	NONE	TJT701016	NONE	TJT703016	16	7.63	7.13
	NONE	TJT701017	NONE	TJT703017	17	8.02	7.52
	NONE	TJT701018	NONE	TJT703018	18	8.41	7.91
	NONE	TJT701019	NONE	TJT703019	19	8.80	8.30
	NONE	TJT701020	NONE	TJT703020	20	9.19	8.69
	Feedback Mounting Tracks	Military P/N		PCD P/N		Mtg. Pos*	Dimensions
	M81714/10-1		TJT702010		10		5.55
	NONE		TJT702002		2	2.43	1.93
	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	3.9	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



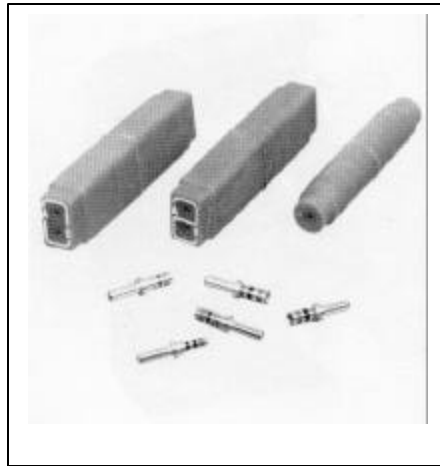
# Terminal Junction Splice Single/Dual/Diode

## M81714/11, /12, Series I

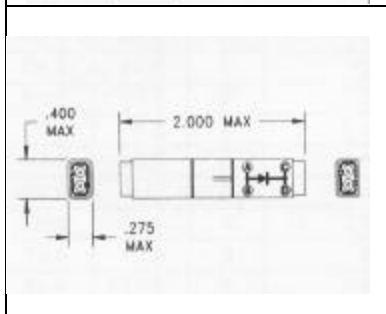
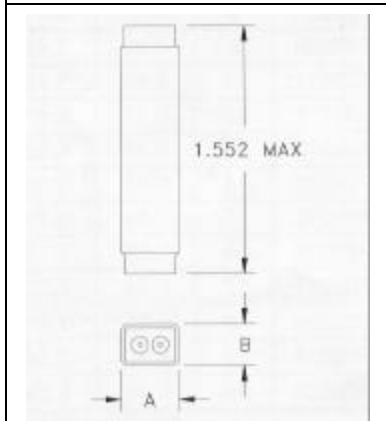
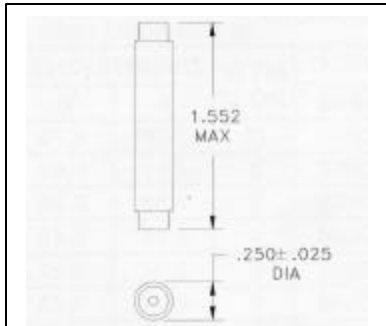
Class D

The single wire and dual wire splices provide a quick, efficient connection qualified to all requirements of the Mil-T-81714/11 and /12 terminal junction system.

TJSE electronic splices can be supplied with a variety of diodes or resistors within the splice package. Meeting the environmental and electrical parameters of M81714/24. Typical examples are indicated below. The electronic splice allows users to incorporate system modifications into a wire bundle, avoiding changes in panels or boards.



- High Temperature
- High Fluid Resistance
- Single and Dual Wire
- Common or Independent Circuits



Single Wire Splices				
Military P/N	PCD P/N	Contact		
		Quantity	Size*	Part No.
M81714/11-20D	TJS320700	2	16/22	M39029/1-101
M81714/11-22D	TJS322700	2	16/22	M39029/1-100

Dual Wire Splices							
Bussing Type	Mil P/N M81714	PCD P/N	Contact			Dim	
			Qty	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

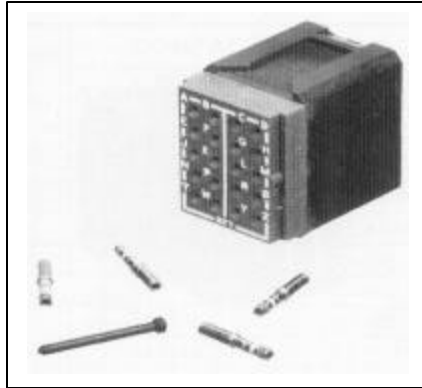
\*Mating Pin/Wire Barrel

Diode Wire Splice**						
Circuit Type	PCD P/N	Diode		Contact		
		P/N	Qty	Size*	P/N M39029	Qty
	TJSE22701	JAN1N5618	1	16/22	/1-100	4
	TJSE20701	JAN1N5618	1	16/20	/1-101	4
	TJSE22702	JAN1N5618	2	16/22	/1-100	4
	TJSE20702	JAN1N5618	2	16/20	/1-101	4

\*Mating Pin/Wire Barrel

\*\*Not QPL Listed

- High Density
- Improved Sealing
- Two-Tine BeCu Contact Retention
- Easy Module Extraction
- All Bus Configurations



### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone rubber per ZZR765

**Contact Retainers:** Beryllium copper

**Internal Pin Contacts and Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating Range:

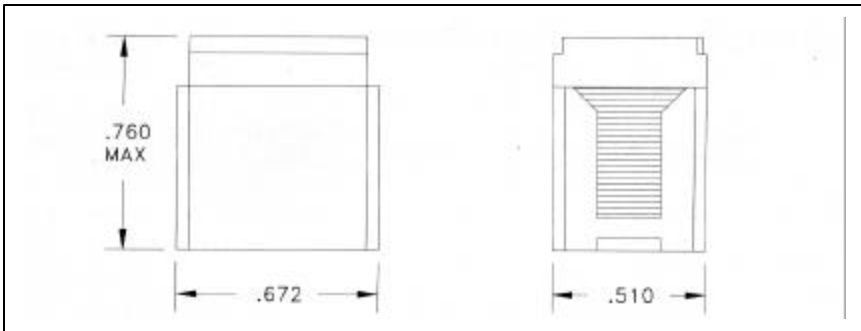
**Temperature:** -65°C to 200°C

**Insulation Resistance:** 5000 megohms min @ 25°C

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 110,000 ft. altitude

**Current Rating:** 5 amps

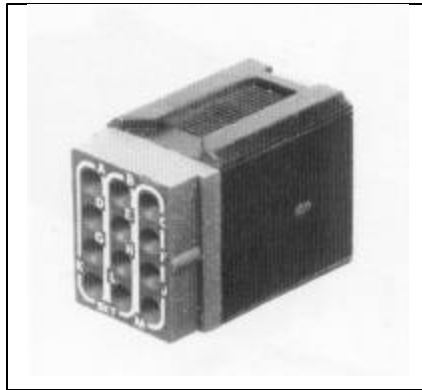
**Vibration and Shock:** Per MIL-Y-81714 Paragraph 3.5.5 and 3.5.8



Bussing Configurations	Military P/N	PCD P/N	Contacts		
			Quantity*	Size**	Part No.
	M81714/60-22-01	SJM022100	20	22/22	M39029/22-191
	M81714/60-22-02	SJM022200	20	22/22	M39029/22-191
	M81714/60-22-04	SJM022400	20	22/22	M39029/22-191
	M81714/60-22-05	SJM022500	20	22/22	M39029/22-191
	M81714/60-22-06	SJM022600	20	22/22	M39029/22-191
	M81714/60-22-10	SJM022700	20	22/22	M39029/22-191

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

- High Density
- Improved Sealing
- Two-Tine BeCu Contact Retention
- Easy Module Extraction
- All Bus Configurations



### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone rubber per ZZR765

**Contact Retainers:** Beryllium copper

**Internal Pin Contacts and Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating Range:

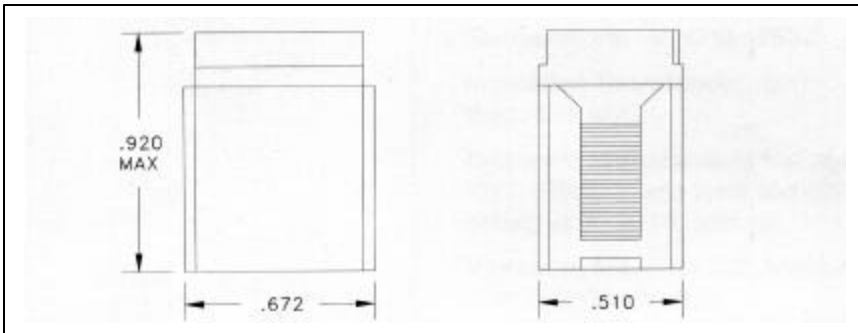
**Temperature:** -65°C to 200°C

**Insulation Resistance:** 5000 megohms min @ 25°C

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 110,000 ft. altitude

**Current Rating:** 7.5 amps

**Vibration and Shock:** Per MIL-Y-81714 Paragraph 3.5.5 and 3.5.8

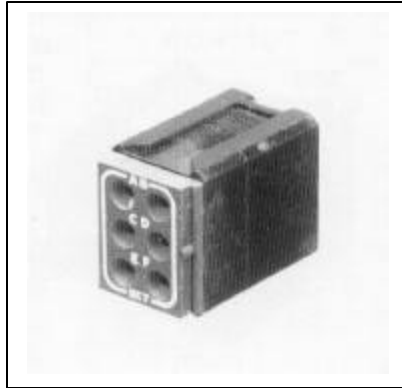


Bussing Configurations	Military P/N	PCD P/N	Contacts		
			Quantity*	Size**	Part No.
	M81714/60-20-01	SJM020100	12	20/20	M39029/22-192
	M81714/60-20-02	SJM020200	12	20/20	M39029/22-192
	M81714/60-20-03	SJM020300	12	20/20	M39029/22-192
	M81714/60-20-04	SJM020400	12	20/20	M39029/22-192
	M81714/60-20-06	SJM020600	12	20/20	M39029/22-192

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

\*\* Mating End/Wire Barrel

- High Density
- Improved Sealing
- Two-Tine BeCu Contact Retention
- Easy Module Extraction
- All Bus Configurations



### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone rubber per ZZR765

**Contact Retainers:** Beryllium copper

**Internal Pin Contacts and Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating Range:

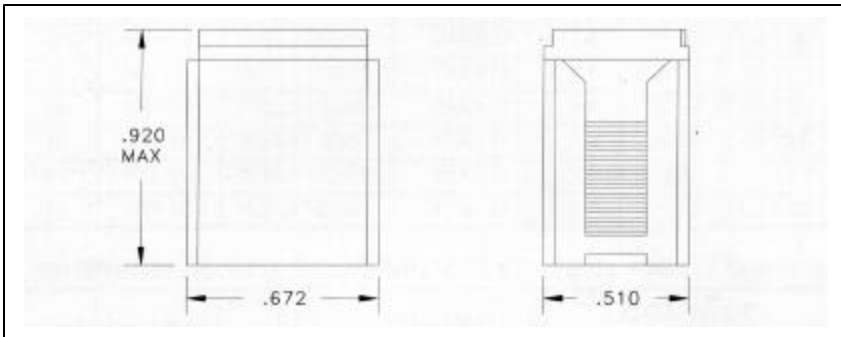
**Temperature:** -65°C to 200°C

**Insulation Resistance:** 5000 megohms min @ 25°C

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 110,000 ft. altitude

**Current Rating:** 13 amps

**Vibration and Shock:** Per MIL-Y-81714 Paragraph 3.5.5 and 3.5.8



Bussing Configurations	Military P/N	PCD P/N	Contacts		
			Quantity*	Size**	Part No.
	M81714/60-16-01	SJM016100	6	16/16	M39029/22-193
	M81714/60-16-02	SJM016200	6	16/16	M39029/22-193
	M81714/60-16-03	SJM016300	6	16/16	M39029/22-193

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

\*\* Mating End/Wire Barrel

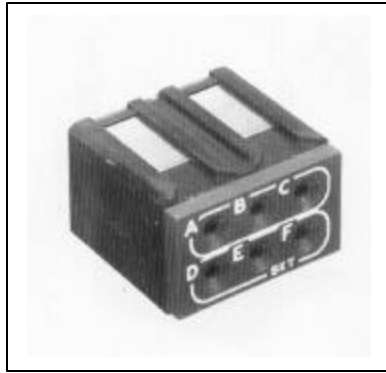


# Socket Junction Modules Relays

## M81714/60-12 Series II

Size 12

- High Density
- Improved Sealing
- Two-Tine BeCu Contact Retention
- Easy Module Extraction
- All Bus Configurations



### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone rubber per ZZR765

**Contact Retainers:** Beryllium copper

**Internal Pin Contacts and Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating Range:

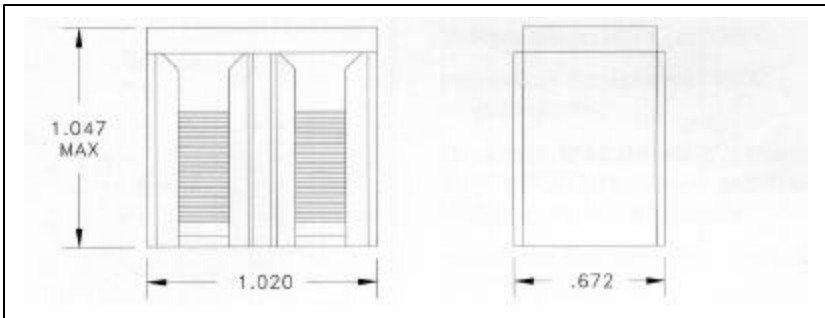
**Temperature:** -65°C to 200°C

**Insulation Resistance:** 5000 megohms min @ 25°C

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level and 200 VRMS at 110,000 ft. altitude

**Current Rating:** 23 amps

**Vibration and Shock:** Per MIL-Y-81714 Paragraph 3.5.5 and 3.5.8

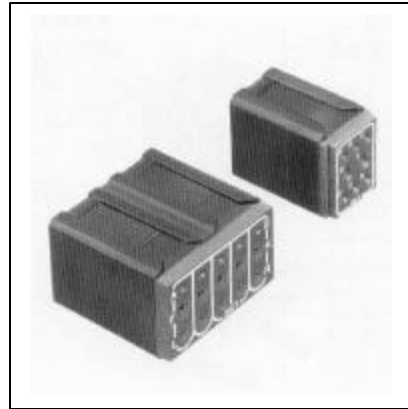


Bussing Configurations	Military P/N	PCD P/N	Contacts		
			Quantity*	Size**	Part No.
	M81714/60-12-01	SJM012100	6	12/12	M39029/22-605
	M81714/60-12-02	SJM012200	6	12/12	M39029/22-605
	M81714/60-12-03	SJM012300	6	12/12	M39029/22-605

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

\*\* Mating End/Wire Barrel

- Power Distribution
- High Density
- Improved Sealing
- Two-Tine BeCu Contact Retention
- Easy Module Extraction
- All Bus Configurations



Distribution Socket Junction Modules, 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.

### Materials:

**Module Body:** Polyetherimide per MIL-P-46184

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Internal Pin Contacts and Socket**

**Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating Range:

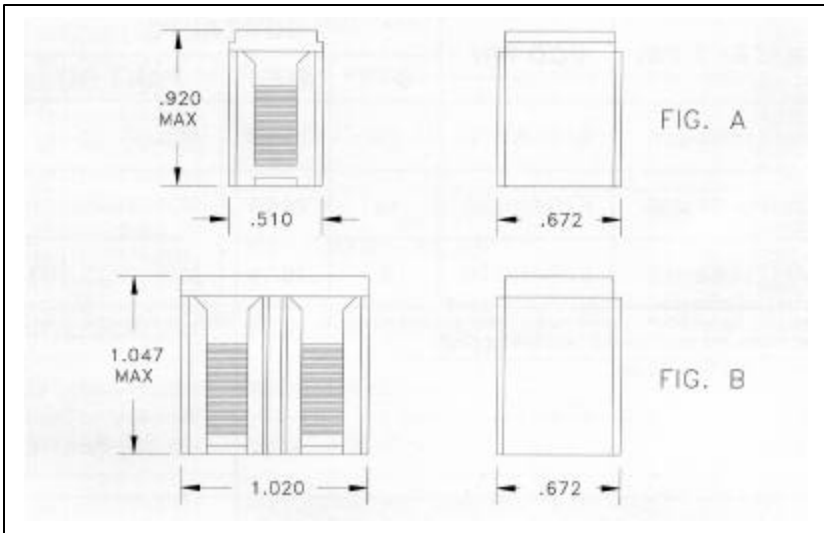
**Temperature:** -65°C to 200°C

**Insulation resistance:** 5000 megohms min. @ 25°C

**Dielectric Withstanding Voltage:** 1500 VRMS at sea level. 200 VRMS at 110,000 ft. altitude

**Current Rating:** (Max.) 5 amps (Size 22), 7.5 amps (Size 20), 13 amps (Size 16), 23 amps (Size 12)

**Vibration and Shock:** Per MIL-T-81714 Paragraph 3.5.5 and 3.5.8



Configuration	Fig.	Military P/N M81714	PCD P/N	Contacts			Bus Description
				Qty	Size	P/N M39029	
	B	/61-0Z	SJM000100	6	16	/22-193	1 Bus
				2	12	/22-605	Two Size 12 and Six Size 16
	A	/61-0Y	SJM000800	6	20	/22-192	1 Bus
				2	16	/22-193	Two Size 16 and Six Size 20
	B	/61-0X	SJM000200	6	16	/22-193	2 Busses
				2	12	/22-605	On Size 12 and Three Size 16 per Bus
	B	/61-0W	SJM000500	5	22	/22-191	5 Busses
				5	20	/22-192	One Size 22, One Size 20 and One Size 16 per Bus
				5	16	/22-193	



# Socket Grounding Modules

## Stud Mount M81714/63 Series II

Mounting directly to a ground plane or ground lug creates a multi-wire sealed grounding device. Mounting to a bus bar provides for power distribution, sensing or metering. All mounting hardware is furnished.

### Materials:

**Module Body:** Polyetherimide per MIL-P-46184.

**Grommet:** Silicone blend elastomer

**Contact Retainers:** Beryllium copper

**Stud/Shell:** Copper alloy, gold plated per MIL-T-10727. Tin plating also available as an alternate.

**Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

**Mounting Hardware:** Steel-cadmium plated per QQ-P-116

### Operating range:

**Temperature:** -65°C to 200°C

**Current Rating (Max):** 5 amps (Size 22), 7.5 amps (Size 20), 13 amps (Size 16)

**Vibration and Shock:** Per MIL-T-81714 Paragraph 3.5.5 and 3.5.8

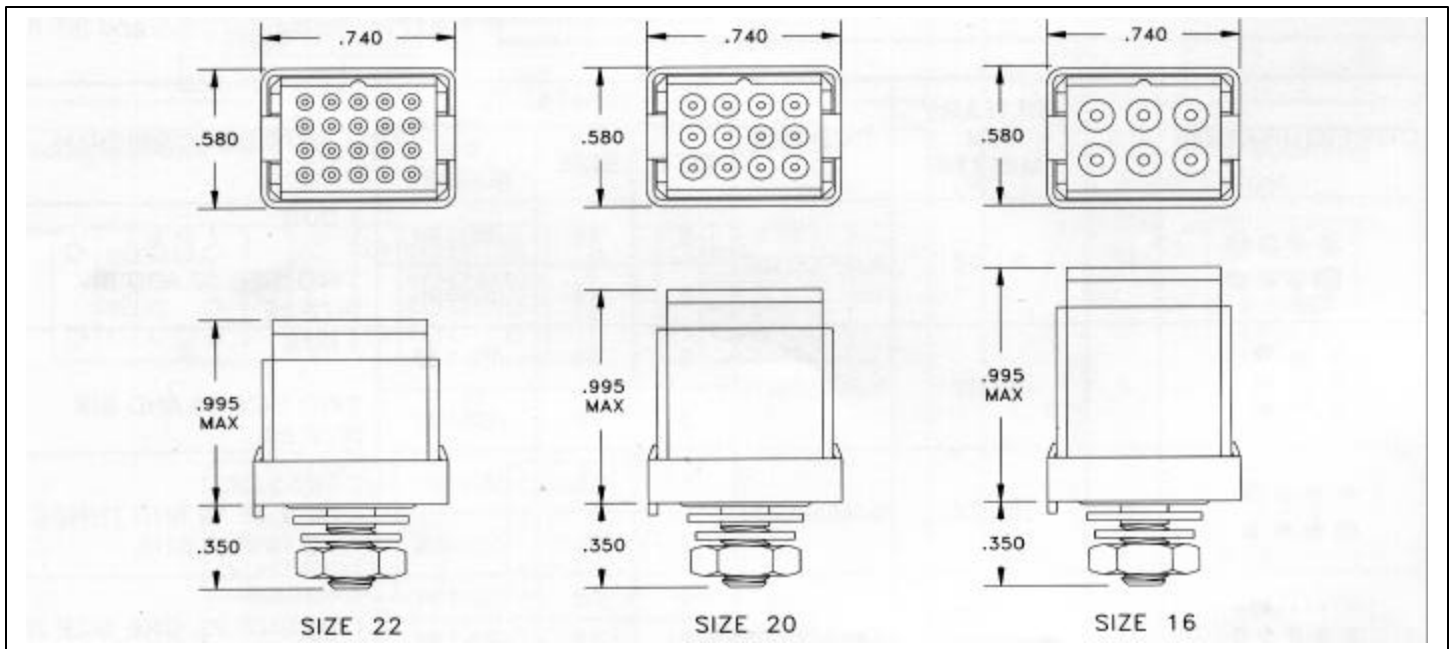


- **Integral Pins and Stud**
- **High Density**
- **Improved Sealing**
- **Two-Tine BeCu Contact Retention**

Military P/N	PCD P/N	Contacts		
		Qty*	Size**	Part No.
M81714/63-22S	SJG022170	20	22/22	M39029/22-191
M81714/63-20S	SJG020170	12	20/20	M39029/22-192
M81714/63-16S	SJG016170	6	16/16	M39029/22-193

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

\*\* Mating End/Wire Barrel







# Socket Grounding Modules

## Flange Mount M81714/63 Series II

Mounting directly to a ground plane or ground lug creates a multi-wire sealed grounding device. Mounting to a bus bar provides for power distribution, sensing or metering.

### Materials:

**Module Body:** Polyetherimide per MIL-P-46184.

**Contact Retainers:** Beryllium copper

**Flange/Shell:** Copper alloy, gold plated per MIL-T-10727. Tin plating also available as an alternate.

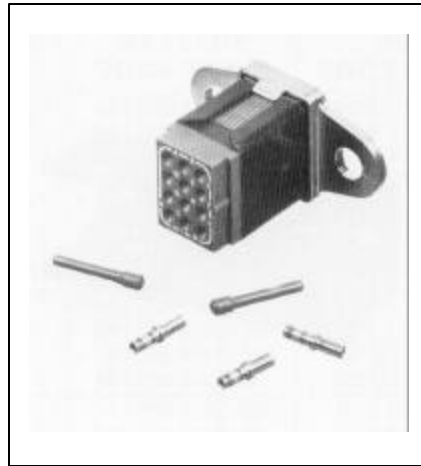
**Socket Contacts:** Copper alloy, hard gold plated per MIL-G-45204

### Operating range:

**Temperature:** -65°C to 200°C

**Current Rating (Max):** 5 amps (Size 22), 7.5 amps (Size 20), 13 amps (Size 16), 23 amps (Size 12)

**Vibration and Shock:** Per MIL-T-81714 Paragraph 3.5.5 and 3.5.8

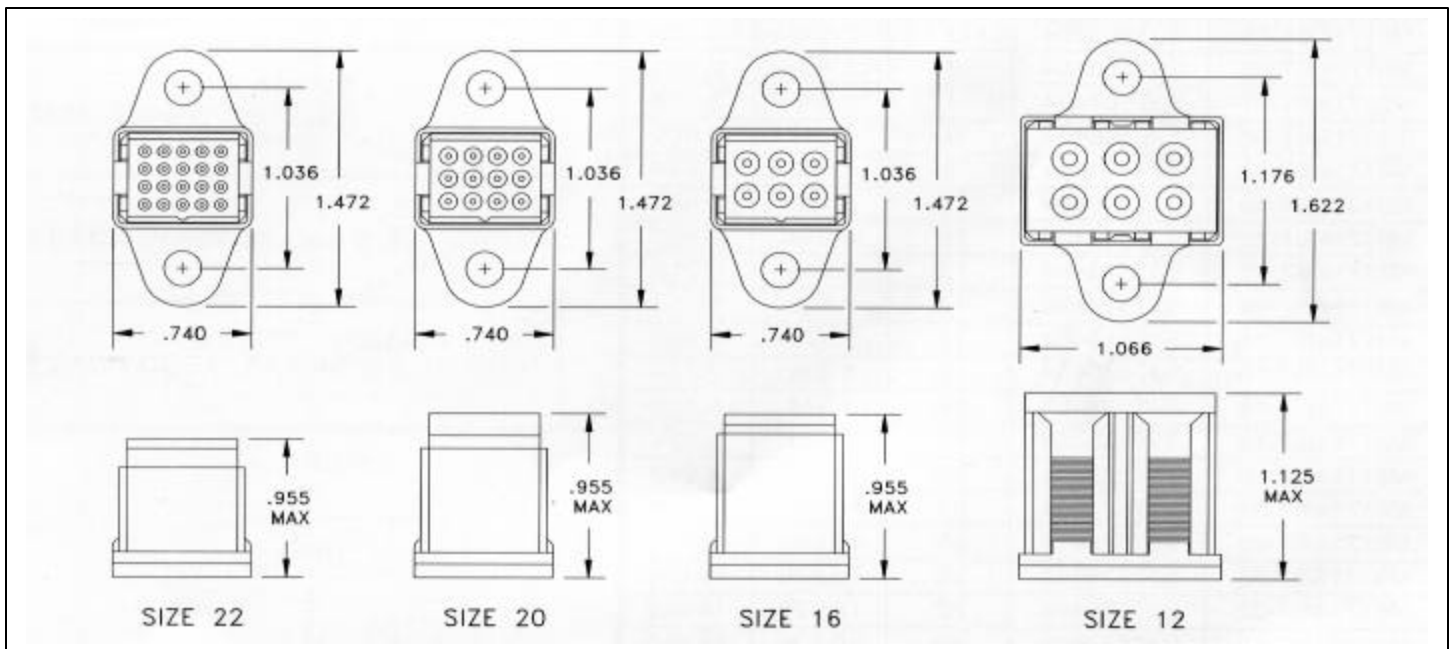


- **Integral Pins and Flange**
- **High Density**
- **Improved Sealing**
- **Two-Tine BeCu Contact Retention**

Military P/N	PCD P/N	Contacts		
		Qty*	Size**	Part No.
M81714/63-22F	SJG022270	20	22/22	M39029/22-191
M81714/63-20F	SJG020270	12	20/20	M39029/22-192
M81714/63-16F	SJG016270	6	16/16	M39029/22-193
M81714/63-12F	SJG012270	6	12/12	M39029/22-605

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

\*\* Mating End/Wire Barrel





# Socket Junction Module Mounting Tracks

## M81714/67 Series II

High strength, lightweight mounting track available with standard black anodized finish. Contact PCD for alternate finishes and markings.

### Materials:

**Rail:** Aluminum alloy. Black anodized finish

**Spring Clips:** Stainless steel

**Rivets:** Stainless steel

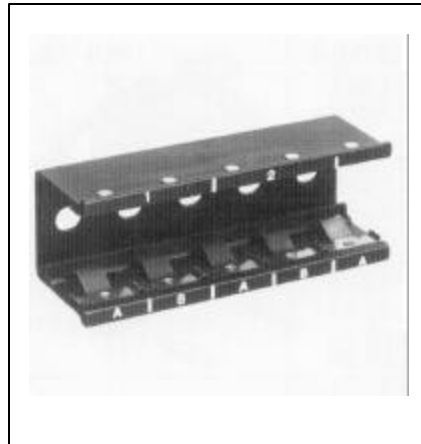
### Operating Range:

**Temperature:** -65°C to 200°C

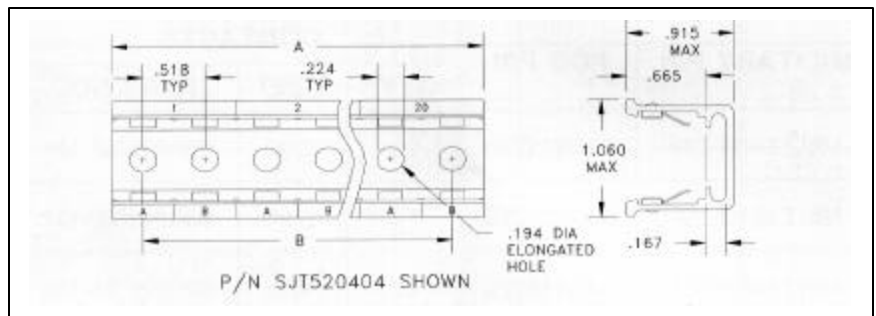
**Corrosion:** No exposure of base metal after 48 hours of salt spray

**Magnetic Permeability:** 2.0 MU max.

**Vibration and Shock:** Per MIL-T-81714 Paragraph 3.5.5 and 3.5.8



- **2 Through 40 Mounting Positions**
- **Optional Finish**
- **Optional Marking**



Mounting Tracks					Removal Tools		
Military P/N	PCD P/N	Mtg. Pos.	Dimensions		Mil P/N	PCD P/N	Description
			A	B			
M81714/67-02	SJT502404	2*	1.036	.518	M81714/69-01	CNA051300	Single
M81714/67-03	SJT503404	3	1.554	1.036			
M81714/67-04	SJT504404	4	2.072	1.554	M81714/69-02	CNA052300	Double
M81714/67-05	SJT505404	5	2.59	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 socket junction modules take two mounting positions