

Amphenol Pcd Relay Sockets

JRS/JRE Quick Mount Relay sockets

Amphenol Pcd Quick Mount Relay Sockets

Amphenol Pcd recently introduced the JRS/JRE line Quick-Mount Relay Sockets. These relay sockets snap mount into standard aircraft panel cutouts and eliminate all socket-to-bulkhead mounting hardware, simplifying installation and dramatically reducing weight and installed cost. JRS/JRE line sockets meet the applicable performance and dimensional requirements of MIL-PRF-12883, are compatible with MIL SPEC approved relays from any manufacturer, and can be utilized in existing avionics systems with standard slotted panel cutouts.



JRS 4 Pole
Relay Sockets

JRS 3 Pole
Relay Sockets

JRS 2 Pole
Relay Sockets

JRS 1 Pole
Relay Sockets

JRE 2 Pole
Relay Sockets

JRE 4 Pole
Relay Sockets

Key Features and Benefits

Socket Construction & Installation

JRS/JRE sockets maintain the same MIL mounting configurations and construction (molded polyetherimide bodies and silicone rubber sealing grommets) as Amphenol Pcd's traditional relay sockets. A heel and toe snap-in system allows the socket to be mounted to the panel without hardware and held securely in place. The assembled socket and relay meet all shock and vibration requirements

Lower Installed Cost

Elimination of loose hardware and the time required to assemble individual hardware components to the sockets results in a reduction of over 45% in socket installation time.

No Loose Hardware

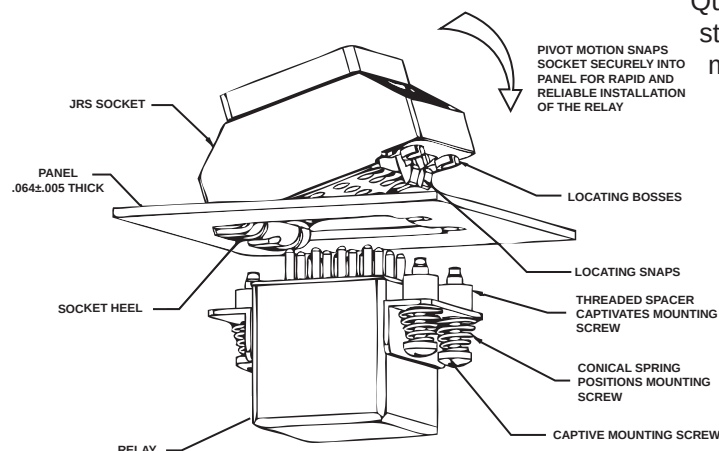
The combination of snap-in relay-to-panel mounting and pre-assembled relay hardware eliminates all loose hardware from the socket and relay mounting and installation process. The logistical and safety issues related with loose hardware are completely avoided.

Relay Installation

JRE/JRS Relay Sockets feature externally threaded mounting screws and spacer assemblies which are pre-assembled to the relay. These mounting screws are captured and aligned by a conical spring, and utilized to fasten the relay to the socket. The screws engage internally threaded bushings captured in the socket and once the relay is secured, the socket snap features are no longer under stress.

Reduced Weight

The elimination of socket mounting hardware and a streamlined polyetherimide body combine to reduce the weight of a Quick-Mount Relay Socket. When compared to Amphenol Pcd standard MIL-PRF-12883 relay sockets provided with traditional mounting hardware, the weight is reduced by 30 to 40%.



Quick Mount Relay Sockets

JRS 4 Pole / 10 Amp / Size 16

Operating Range

Temperature:

-65°C to 125°C

Insulation Resistance:

1000 Megaohms Min.

Dielectric Withstanding Voltage:

1500 VRMS at Sea Level

500 VRMS at 80,000 ft.

Vibration:

MIL-STD-202, Method 204

Test Condition G

Shock:

MIL-STD-213, Method 213

Test Condition C

Materials

Socket Body:

Polythermide per ASTM-D5205

Grommet:

Silicone Rubber per A-A-59588

Contact Retainers:

Stainless Steel

Internal Socket Contacts:

Copper Alloy, Hard Gold Finish

per SAE-AMS-2422

Quick Mount Relay Sockets



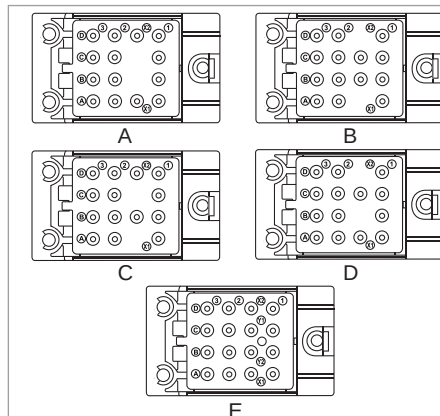
Replaces MIL-PRF-12883/40

Mates with M83536, 83726 & MS27709 Relays

Extended Height Relay Sockets

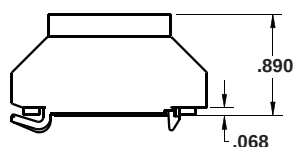
APCD P/N	QTY	Size ¹	Contact	Mating Relay	Configuration
JRS400100	14	16/16	/92-533	M83536, M83726, MS27709	A
JRS400200	14	16/16	/92-533	M83536, M83726, MS27709	B
JRS400300	14	16/16	/92-533	M83536, M83726, MS27709	C
JRS400400	14	16/16	/92-533	M83536, M83726, MS27709	D
JRS400500	16	16/16	/92-533	M83536, M83726, MS27709	E

Socket Configurations

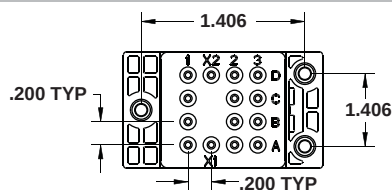


Relay Socket Dimensions

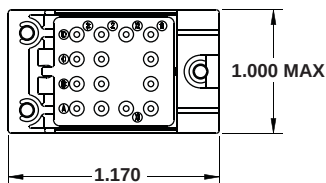
Side View



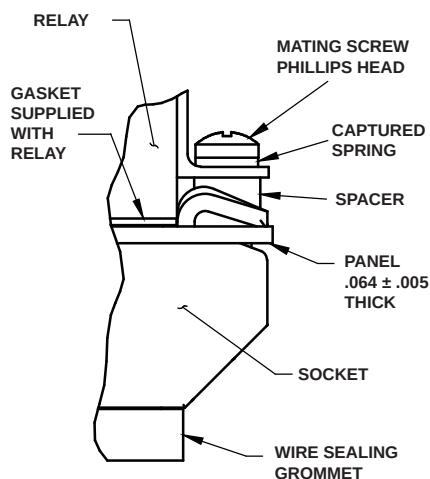
Top View



Bottom View



Mounting Hardware



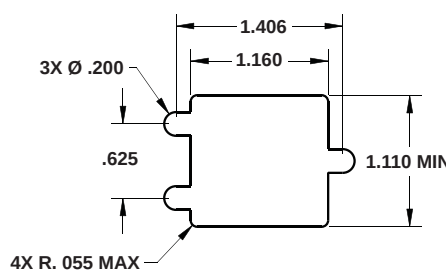
Part Number Instructions

APCD P/N	Hardware	Contacts
JRS400100	NONE	NONE
JRS400101	NONE	YES
JRS400110	YES	NONE
JRS400111	YES	YES

Relay Socket Weight

Relay Socket	Pounds	Grams
Low Profile	.068	31

Required Mounting Panel Cutout



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Crimp Removable Socket Contacts

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

Materials:

Body:

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

Hood:

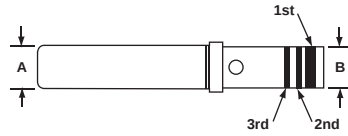
Stainless Steel Passivated

Performance:

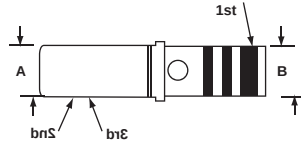
Performance:

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

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Crimp Removable Socket Contacts

MIL-C-39029/92

Materials:

Body:

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

Hood:

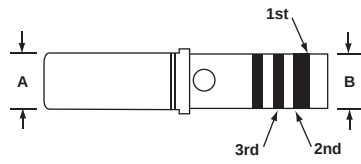
Stainless Steel Passivated

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)
M39029/92 Contacts									
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
M39029/92 Contacts				
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