

Glenair®



Series 811 Mighty Mouse High Density (HD) Connectors

*The Ultraminiature Ruggedized Connector
with High-Performance Micro TwistPin Contacts*

United States ■ United Kingdom ■ Germany ■ France ■ Nordic ■ Italy ■ Spain ■ Japan

SERIES 811 HIGH DENSITY

OUR HIGHEST DENSITY MIGHTY MOUSE YET!

**THREE AMP MICRO TWISTPIN CONTACTS ON .050
INCH CENTERS FOR SIZE #26 TO #30 AWG WIRE**



Glenair Series 811 Mighty Mouse High Density (HD) connectors are already deployed in countless high reliability applications. In fact, the Mighty Mouse HD connector is now the new high-density connector standard for ruggedized environmental circular connectors in weight and size sensitive applications such as soldier gear, unmanned vehicles, and man-portable satellite uplink equipment. The Series 811 High Density (HD) utilizes the same ultraminiature form factor connector shells as our standard 801 Mighty Mouse, but adds high performance micro TwistPin contacts set on .050 inch centers for optimal contact layout density. Five insert arrangements are available from 7 to 42 contacts. Additional insert arrangements are in the works.



Series 811 Mighty Mouse HD Table of Contents and Product Selection Guide

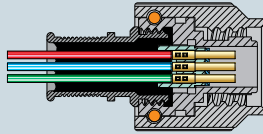


Mighty Mouse
High Density

SERIES 811 HIGH-DENSITY DOUBLE-START PRODUCT SELECTION GUIDE

Introduction and General Reference

Page 2

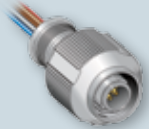


Introduction and General Reference

Connector product features, contact arrangements, space grade MOD codes, material and finish specifications and a product selection guide.

Pre-Wired Plug Connectors

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Series 811 HD Pre-Wired Plug Connectors

Factory terminated plug connectors with optional PTFE or Tefzel® insulated wire; backpotted with epoxy.

Pre-Wired In-Line Receptacles

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Series 811 HD In-Line Pigtail Receptacle Connectors

Factory terminated in-line receptacles with optional PTFE or Tefzel® insulated wire; backpotted with epoxy.

Square Flange Pigtail Receptacles

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Series 811 HD Square Flange Pigtail Receptacles

Factory terminated square flange pigtail receptacles with optional PTFE or Tefzel® insulated wire; backpotted with epoxy.

Jam Nut Pigtail Receptacles

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Series 811 HD Jam Nut Pigtail Receptacles

Factory terminated jam nut pigtail receptacles with optional PTFE or Tefzel® insulated wire; backpotted with epoxy.

Jam Nut PC Tail Receptacles

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811-005-07, 811-006-07

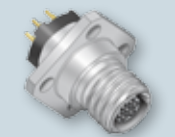


Series 811 HD Jam Nut Straight PCB Receptacles

Jam nut mount straight PC tail receptacles with enhanced environmental sealing for open faced immersion requirements.

Square Flange PC Tail Receptacles

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Series 811 HD Square Flange Straight PCB Receptacles

Square flange panel mount PC tail receptacles with enhanced environmental sealing for open faced immersion requirements.

Harsh Environment Cordsets

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Series 811 HD Harsh Environment Cordsets

Overmolded Series 811 cordsets withstand abrasion and chemical exposure. Silver coated stranded conductors with TFE insulation, tinned copper braid shield and extruded polyurethane jacket.

Mighty Mouse HD Accessories

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Series 811 Mighty Mouse Accessories

Protective metal and rubber covers as well as Full Nelson Heatshrink Boots.

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Introduction



811-001-06ME9-42SA

Series 811 Plug



811-003-07ME9-42PA

Series 811 Receptacle

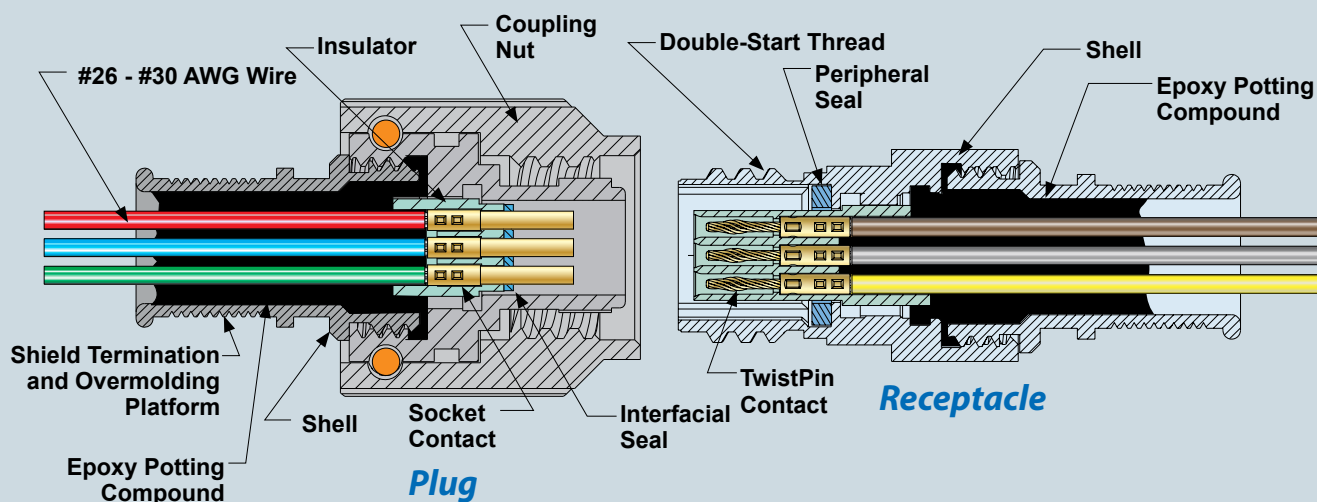
- High Density Micro TwistPin Contact System
- 600 VAC DWV Rating
- 7 to 42 Contacts
- 3 Amp Current Rating
- Water Resistant to 1 Meter

New Mighty Mouse High Density Connector Delivers Size and Weight Savings and Outstanding Performance



New Series 811 Mighty Mouse HD connector features high performance TwistPin contacts for increased circuit density and outstanding shock and vibration performance. High density .050 inch (1.27mm) contact spacing essentially doubles the pincount compared to our standard Mighty Mouse. The unique spring construction of the pin contact results in excellent resistance to high levels of shock and vibration. Three configurations are available: pre-wired pigtail cable assemblies with insulated hookup wire, shielded cordsets, and printed circuit board versions. Connectors are backpotted with epoxy and are suitable for hostile environment applications. The Series 811 Mighty Mouse HD connector is a double-start ACME threaded version, available with 7, 12, 22, 30 and 42 contacts for size #26 to #30 AWG wire.

Series 811 Mighty Mouse HD with High Performance TwistPins



Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD) Introduction



About TwistPin Contacts

Widely used for radars, missiles, avionics, and space vehicles, the Micro TwistPin is a spring pin composed of helically wound strands of copper alloy wire, welded into a bundle, then "bulged" and crimped to a copper alloy sleeve. These gold over nickel plated pins and sockets offer low, stable contact resistance even when subjected to temperature extremes and vibration. Designers of soldier systems electronics equipment have turned to the TwistPin contact in order to reduce the size and weight of warfighter electronics.

Unlike other microminiature contact systems, the TwistPin contact is terminated to wire with a military-approved four-indent crimp joint. Crimping results in a gas tight connection between the wire and the contact.

TwistPin Contact



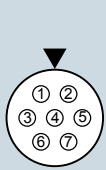
TwistPin



Socket

SERIES 811 MIGHTY MOUSE HD CONTACT ARRANGEMENTS

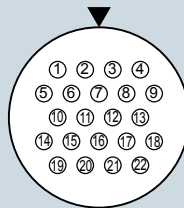
Pin insert shown, use reverse order for socket inserts.



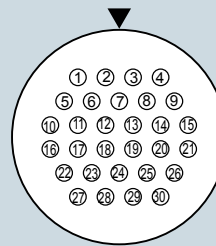
5-7
7 Contacts



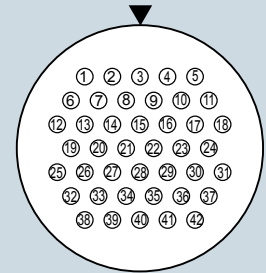
6-12
12 Contacts



7-22
22 Contacts



8-30
30 Contacts



9-42
42 Contacts

MIL-STD-681 COLOR CODE CHART

PIN NO.	MIL-STD-681 NUMBER	Base Color	First Stripe	Second Stripe	PIN NO.	MIL-STD-681 NUMBER	Base Color	First Stripe	Second Stripe
1	0	BLK			22	903	WHT	BLK	ORN
2	1	BRN			23	904	WHT	BLK	YEL
3	2	RED			24	905	WHT	BLK	GRN
4	3	ORN			25	906	WHT	BLK	BLU
5	4	YEL			26	907	WHT	BLK	VIO
6	5	GRN			27	908	WHT	BLK	GRY
7	6	BLU			28	912	WHT	BRN	RED
8	7	VIO			29	913	WHT	BRN	ORN
9	8	GRY			30	914	WHT	BRN	YEL
10	9	WHT			31	915	WHT	BRN	GRN
11	90	WHT	BLK		32	916	WHT	BRN	BLU
12	91	WHT	BRN		33	917	WHT	BRN	VIO
13	92	WHT	RED		34	918	WHT	BRN	GRY
14	93	WHT	ORN		35	923	WHT	RED	ORN
15	94	WHT	YEL		36	924	WHT	RED	YEL
16	95	WHT	GRN		37	925	WHT	RED	GRN
17	96	WHT	BLU		38	926	WHT	RED	BLU
18	97	WHT	VIO		39	927	WHT	RED	VIO
19	98	WHT	GRY		40	928	WHT	RED	GRY
20	901	WHT	BLK	BRN	41	934	WHT	ORN	YEL
21	902	WHT	BLK	RED	42	935	WHT	ORN	GRN

Dimensions in Inches (millimeters) are subject to change without notice.

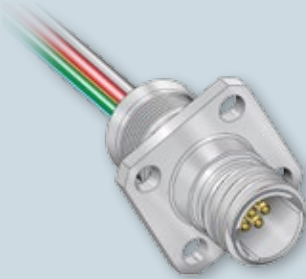
Series 811 Mighty Mouse HD with Double-Start ACME Mating Thread and .050" pitch (1.27mm) TwistPin Contact

Series 811 Mighty Mouse HD connector is a high density version of the Mighty Mouse Series 801 connector. The Series 811 connector features a quick-mating, damage-resistant double-start thread with the Glenair twistpin contact system for increased circuit density.

SERIES 811 MIGHTY MOUSE HD CONNECTOR SELECTOR



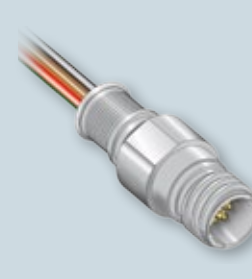
Pre-Wired Plugs
Page 8



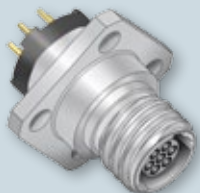
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Square Flange PCB Receptacles
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Jam Nut PCB Receptacles
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Overmolded Cordsets
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Jam Nut Tightening Tool

Tightening tools fit Series 811 spanner nuts supplied with jam nut receptacle connectors. Use with square drive torque wrench. Torque to 20-25 inch-pounds (2.2 – 2.8 N m). Carbon steel, nickel plated.



Shell Size	Jam Nut Tool Part Number	Drive Square
5	600-146-02	1/4" Drive
6	600-146-03	1/4" Drive
7	600-146-05	3/8" Drive
8	600-146-05	3/8" Drive
9	600-146-06	3/8" Drive

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD) Specifications



Application Note:

Sand and Dust Exposure

Glenair TwistPin contacts can be damaged by sand and dust. Unmated connectors should be covered to prevent debris and contamination from accumulating inside the contact cavities. Please see our metal and rubber protective cover offerings starting on page 19.

SPECIFICATIONS	
Current Rating	3 AMPS
Dielectric Withstanding Voltage	600 VAC sea level, 150 VAC at 70,000 ft.
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +150° C.
Contact Resistance	8 milliohms maximum
Low Level Contact Resistance	32 milliohms maximum
Water Immersion, Mated	MIL-STD-810G, Method 512.5 1 meter for 1 hour
Water Ingress, Mated	Ingress protection 67
Helium Leak rate, Sealed PC tail Receptacles (811-006)	1 x 10 ⁻⁴ cc/sec at 1 atmos. pressure differential, following 5 cycles of thermal shock
Shock	300 g's (MIL-DTL-38999 para. 4.5.21.1)
Vibration, Sine	60 g's (MIL-DTL-38999 para. 4.5.23.2.1)
Vibration, Random	23 g's (MIL-DTL-38999 para. 4.4.23.1)
Humidity	EIA-364-31, Cond. IV
Altitude-Low Temperature	EIA-364-105
Durability	2000 cycles of mating
Magnetic Permeability	2 μ maximum
Corrosion (Salt Spray)	Electroless Nickel finish (ME) 96 hours Nickel-PTFE finish (MT) 500 hours Black Zinc-Nickel (ZR) 500 Hours
Shielding Effectiveness	55 dB minimum from 100MHz to 1000MHz.

MATERIALS AND FINISHES	
Shell, Jam Nut, Coupling Nut	Aluminum alloy
Contact	Copper alloy, 50 μ inch gold over nickel plated
Insulator	Glass-reinforced thermoplastic
Interfacial Seal, O-ring, Peripheral Seal	Fluorosilicone rubber

SERIES 811 RECOMMENDED TORQUE VALUES								
Layout	Coupling Torque				Jam Nut Tightening			
	In-Lbs.		N-m		In-Lbs.		N-m	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
5-7	25	35	2.8	4.0	20	25	2.2	2.8
6-12	35	40	4.0	4.5	20	25	2.2	2.8
7-22	35	40	4.0	4.5	20	25	2.2	2.8
8-30	40	50	4.5	5.7	20	25	2.2	2.8
9-42	40	50	4.5	5.7	20	25	2.2	2.8

KEY POSITIONS				
Position	A°	B°		
A	140°	220°	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Plug</p> </div> <div style="text-align: center;"> <p>Receptacle</p> </div> </div>	
B	65°	220°		
C	85°	240°		
D	130°	285°		
E	65°	285°		
F	85°	220°		

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Connector Material and Finish Options

Connector Finishes

Three standard plating finishes are available for Series 811 connectors: nickel, nickel-PTFE and black zinc-nickel. Other finishes are readily available; however, these three finishes are recommended for most operating environments.

Choose **electroless nickel** (ME) for best shielding performance where connectors are not likely to be subjected to corrosive environments.

Nickel-PTFE (code MT) is an extremely durable, conductive finish now replacing olive-drab cadmium in corrosive environments. The gun metal grey color is compatible with most equipment.

Black Zinc-Nickel (Code ZR) is intended for tactical equipment where a non-reflective finish is preferred.

Connector Materials

For most applications, aluminum alloy is the preferred material choice for connector bodies, coupling nuts and jam nuts. However, Series 811 connectors are also available in stainless steel or marine bronze. Refer to the table below for alternate material choices. Replace the standard material/finish code with the desired code from the table.

SERIES 811 MATERIAL AND FINISH CODES							
Code	Material	Finish	Finish Specification	Hrs. Salt Spray	Electrical Conductivity	Operating Temp. Range	RoHS Compliance
AB	Marine Bronze	Unplated		1000	Conductive	-65 to +200°C	✓
AL	Aluminum	AlumiPlate	MIL-DTL-83488	1000	Conductive	-65 to +175°C	✓
C	Aluminum	Anodize, Black	AMS-A-8625	336	Non-Conductive	-65 to +175°C	✓
E	Aluminum	Chem Film	MIL-DTL-5541	168	Conductive	-65 to +175°C	
G2	Aluminum	Anodize, Hardcoat	AMS-A-8625	336	Non-Conductive	-65 to +200°C	✓
JF	Aluminum	Cadmium, Gold	SAE-AMS-QQ-P-416	1000	Conductive	-65 to +175°C	
LF	Aluminum	Cadmium, Clear	SAE-AMS-QQ-P-416	1000	Conductive	-65 to +175°C	
ME	Aluminum	Electroless Nickel	AMS-C-26074	96	Conductive	-65 to +200°C	✓
MT	Aluminum	Nickel-PTFE	GMF-002	1000	Conductive	-65 to +175°C	✓
NC	Aluminum	Zinc-Cobalt, Olive Drab	ASTM B 840	350	Conductive	-65 to +175°C	
NF	Aluminum	Cadmium, Olive Drab	SAE-AMS-QQ-P-416	1000	Conductive	-65 to +175°C	
P	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290	500	Conductive	-65 to +200°C	✓
UC	Aluminum	Zinc-Cobalt, Black	ASTM B 840	350	Conductive	-65 to +175°C	
UCR	Aluminum	Zinc-Cobalt, Black (RoHS)	ASTM B 840	350	Conductive	-65 to +175°C	✓
Z1	Stainless Steel	Passivate	SAE-AMS-QQ-P-35	1000	Conductive	-65 to +200°C	✓
Z2	Aluminum	Gold	MIL-DTL-45204	48	Conductive	-65 to +200°C	✓
ZC	Stainless Steel	Zinc-Cobalt, Black	ASTM-B840	1000	Conductive	-65 to +175°C	
ZCR	Stainless Steel	Zinc-Cobalt, Black (RoHS)	ASTM-B840	1000	Conductive	-65 to +175°C	✓
ZL	Stainless Steel	Electrodeposited Nickel	SAE-AMS-QQ-N-290	1000	Conductive	-65 to +200°C	✓
ZM	Stainless Steel	Electroless Nickel	AMS-C-26074	1000	Conductive	-65 to +200°C	✓
ZMT	Stainless Steel	Nickel-PTFE	GMF-002	1000	Conductive	-65 to +175°C	✓
ZN	Aluminum	Zinc-Nickel, Olive Drab	ASTM B841	1000	Conductive	-65 to +175°C	
ZNU	Aluminum	Zinc-Nickel, Black	ASTM B841	1000	Conductive	-65 to +175°C	
ZR	Aluminum	Zinc-Nickel, Black	ASTM B841	1000	Conductive	-65 to +175°C	✓
ZU	Stainless Steel	Cadmium, Black	SAE-AMS-QQ-P-416	1000	Conductive	-65 to +175°C	
ZW	Stainless Steel	Cadmium, Olive Drab	SAE-AMS-QQ-P-416	2000	Conductive	-65 to +175°C	

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Connectors for Space Flight

The Series 811 connector is well-suited for space-flight applications. High density TwistPin contacts and other materials are already used in the NASA-approved Glenair Micro-D connector. The standard Series 811 connector with nickel plated aluminum shells is considered to be "flight-ready", but optional NASA screening is also available.

HOW TO ORDER SPACE GRADE SERIES 811 CONNECTORS

Step 1: Find a Standard Part Number

Electroless nickel plated shells are preferred for space flight. Cadmium plating is prohibited.

Step 2: Select a NASA Screening Level

The term "Screening Level" refers to the final inspection procedure.
Level 1 for mission-critical highest reliability
Level 2 for high reliability
Level 3 for standard reliability

Step 3: Choose Outgassing Processing

The fluorosilicone rubber seals commonly used on aerospace-grade connectors such as MIL-DTL-38999 and Series 80 connectors, along with certain bonding agents and inks, do not meet NASA outgassing requirements unless the connector is specially processed. Glenair outgassing tests have shown oven baking or thermal vacuum outgassing processing are sufficient to reduce outgassing levels to NASA standards. Oven baking is more economical than thermal vacuum outgassing.

Step 4: Select the Mod 429 Code that Matches the Desired Level of Screening and Outgassing

Use the following table to choose the right modification code. Add the mod code to the connector part number. Example: 811-001-06ME5-7PA-429C429C7PA-429C7PA-429C

Application Note:

Outgassing

The Series 811 Mighty Mouse HD connector is suitable for use in space applications; however, the fluorosilicone seal exceeds the outgassing limits of ASTM E595. A simple oven bakeout is sufficient to remove volatile materials. Special thermal vacuum outgassing is available using the suffix codes shown at right. A second option is to remove the interfacial seal from the socket connector, thus eliminating the need for special outgassing processing.

NASA SCREENING LEVELS AND MODIFICATION CODES

NASA Screening Level	Special Screening, Connector Supplied with Interfacial Seal	Special Screening, Connector Supplied without Interfacial Seal	Special Screening Plus Outgassing Processing	
			8 Hour Oven Bake 400° F.	Thermal Vacuum Outgassing 24 hrs. 125° C.
Level 1 Highest Reliability	Mod 429B	Mod 429F	Mod 429J	Mod 429C
Level 2 High Reliability	Mod 429	Mod 429D	Mod 429K	Mod 429A
Level 3 Standard Reliability	(Use standard P/N)	Mod 432	Mod 186	Mod 186M

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Pre-Wired Plug Connectors

811-001-06

Pre-Wired Plug Connectors

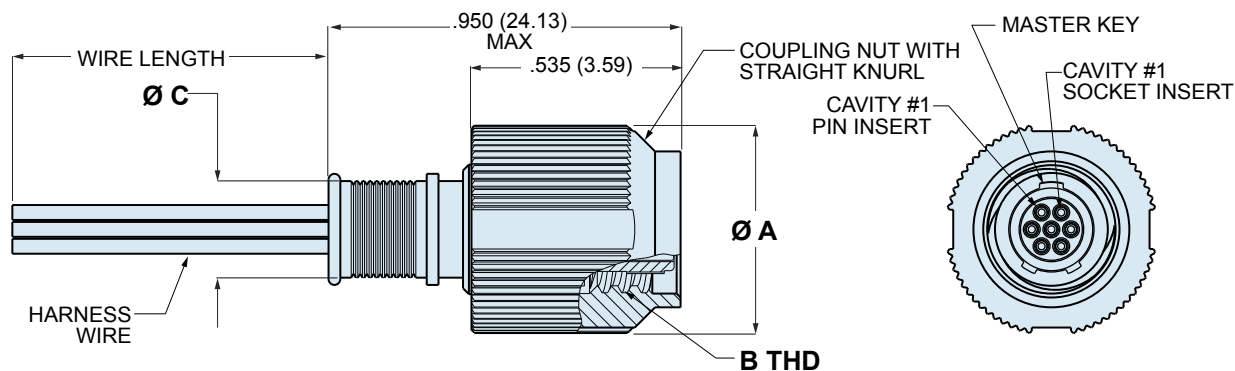


Series 811 Mighty Mouse High Density plugs feature damage-resistant double-start ACME mating threads and integral shielding/overmolding platforms. These plugs are factory-terminated to insulated wire and backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose Type K general purpose Teflon® wire or Type J lightweight space-grade Tefzel® wire. 3A current rating, 600 VAC dielectric withstanding voltage.

HOW TO ORDER SERIES 811 PLUGS

Sample Part Number

811-001-06	MT	5-7	P	A	6	K	7	-18
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	Wire Size	Wire Type	Wire Color	Wire Length (Inches)
811-001-06 Series 811 Plug Connector with High Density TwistPins, Pre-wired Pigtails, Double-Start Thread	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	6 #26	K PTFE insulation, silver-coated, 200°C, (M22759/11)	1 White	Specify any length from 2 inches to 144 inches
	MT Nickel-PTFE	6-12 12 Contacts	S Socket Contacts	Alternate Key Positions	8 #28	J Tefzel® insulation, high strength lightweight silver-coated, 200°C, (M22759/33)	5 Color code per MIL-STD-681 (striped)	
	ZR Black Zinc-Nickel	7-22 22 Contacts		B C D E F	0 #30 (Wire Type J only)		7 10 Solid colors, repeating	
		8-30 30 Contacts						
		9-42 42 Contacts						



DIMENSIONS

Shell Size	Ø A		B Thread	Ø C	
	In.	mm.		In.	mm.
5	.540	13.72	.3125-.05P-.1L-2B	.246	6.25
6	.600	15.24	.375-.05P-.1L-2B	.286	7.26
7	.730	18.54	.4375-.05P-.1L-2B	.391	9.93
8	.800	20.32	.5000-.05P-.1L-2B	.443	11.25
9	.862	21.89	.5625-.05P-.1L-2B	.498	12.65

Series 811 Mighty Mouse High Density (HD)
Pre-Wired In-Line Receptacle Connectors
811-003-01



Mighty Mouse
High Density

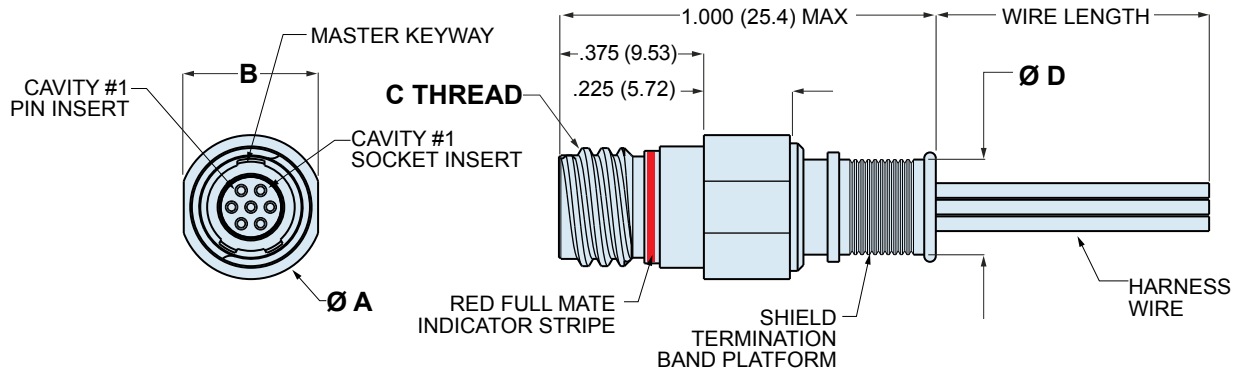


In-Line Pigtail Receptacles

Series 811 Mighty Mouse High Density in-line receptacles feature damage-resistant double-start ACME mating threads and integral shielding/overmolding platforms. These receptacles are factory-terminated to insulated wire and backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose Type K general purpose Teflon® wire or Type J lightweight space-grade Tefzel® wire. 3A current rating, 600 VAC dielectric withstanding voltage.

HOW TO ORDER SERIES 811-003-01 IN-LINE RECEPTACLES

Sample Part Number								
811-003-01	MT	5-7	S	A	8	K	7	-18
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	Wire Size	Wire Type	Wire Color	Wire Length (Inches)
811-003-01 Series 811 In-Line Receptacle Connector with High Density TwistPins, Pre-Wired Pigtails, Double-Start Thread	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	6 #26	K PTFE insulation, silver-coated, 200°C, (M22759/11)	1 White	Specify any length from 2 inches to 144 inches
	MT Nickel-PTFE	6-12 12 Contacts	S Socket Contacts	A Alternate Key Positions	8 #28		5 Color code per MIL-STD-681 (striped)	
	ZR Black Zinc-Nickel	7-22 22 Contacts			0 #30 (Wire Type J only)	J Tefzel® insulation, high strength lightweight silver-coated, 200°C, (M22759/33)	7 10 Solid colors, repeating	
		8-30 30 Contacts						
		9-42 42 Contacts						



Shell Size	DIMENSIONS							
	Ø A		B Flat		C Thread	Ø D		
	In.	mm.	In.	mm.		In.	mm.	
5	.375	9.53	.350	8.89	.3125-.05P-.1L-2A	.246	6.25	
6	.415	10.54	.390	9.91	.3750-.05P-.1L-2A	.286	7.26	
7	.500	12.70	.475	12.07	.4375-.05P-.1L-2A	.391	9.93	
8	.580	14.73	.555	14.10	.5000-.05P-.1L-2A	.443	11.25	
9	.635	16.13	.610	15.49	.5625-.05P-.1L-2A	.498	12.65	



Series 811 Mighty Mouse High Density (HD) Pre-Wired Square Flange Receptacle Connectors

811-003-02 and 811-004-02

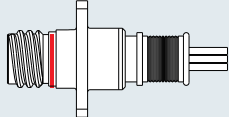
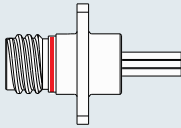


Square Flange Pigtail Receptacles

Series 811 Mighty Mouse High Density panel mount receptacles feature damage-resistant double-start ACME mating threads. These receptacles are factory-terminated to insulated wire and backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose Type K general purpose Teflon® wire or Type J lightweight space-grade Tefzel® wire. 3A current rating, 600 VAC dielectric withstanding voltage.

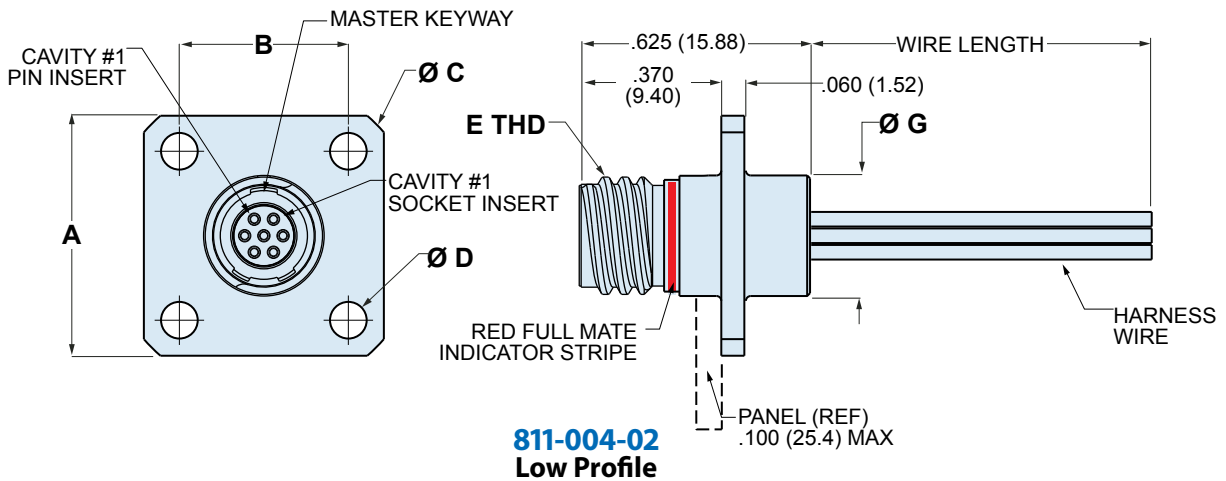
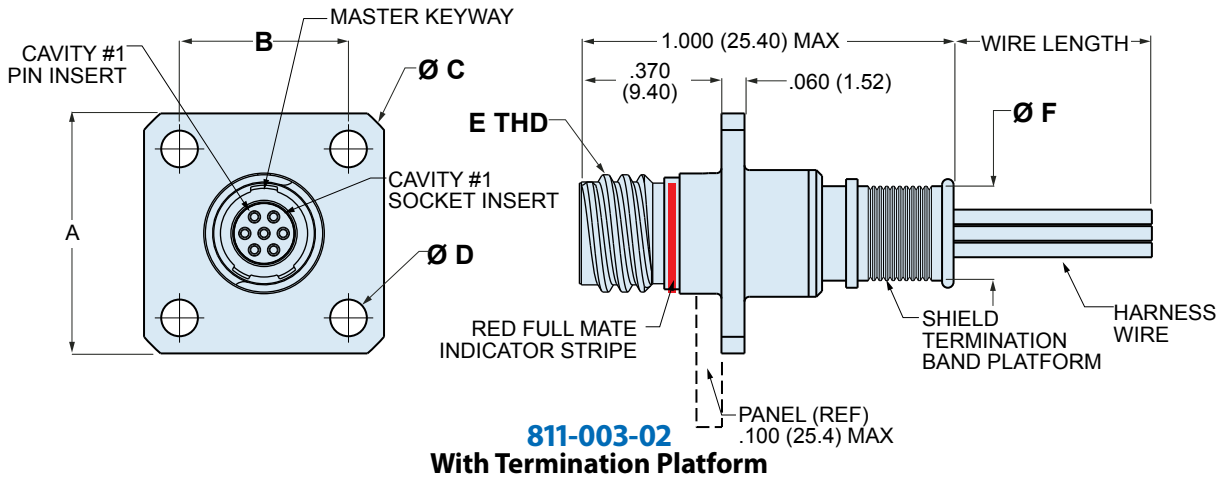
HOW TO ORDER SERIES 811 SQUARE FLANGE PIGTAIL RECEPTACLES

Sample Part Number

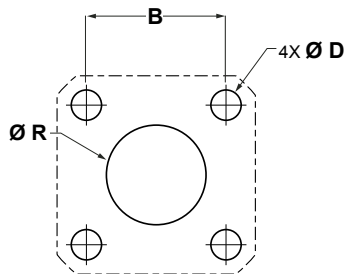
811-003-02	MT	5-7	P	A	6	K	7	-18
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	Wire Size	Wire Type	Wire Color	Wire Length (Inches)
 811-003-02 Panel Mount Square Flange Receptacle Connector with Termination Platform for Shield Attachment or Overmolding	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	6 #26	K PTFE insulation, silver-coated, 200°C, (M22759/11)	1 White	12 18 36 72
	MT Nickel-PTFE	6-12 12 Contacts	S Socket Contacts	Alternate Key Positions	8 #28	J Tefzel® insulation, high strength lightweight silver-coated, 200°C, (M22759/33)	5 Color code per MIL-STD-681 (striped)	Specify any length from 2 inches to 144 inches
ZR Black Zinc-Nickel	7-22 22 Contacts	0 #30 (Wire Type J only)	B C D E F	7 10 Solid colors, repeating				
 811-004-02 Low Profile Panel Mount Square Flange Receptacle Connector		8-30 30 Contacts						
		9-42 42 Contacts						

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD)
Pre-Wired Square Flange Receptacle Connectors
811-003-02 and 811-004-02



DIMENSIONS													
Shell Size	A Square		B Square		Ø C		Ø D		E Thread	Ø F		Ø G	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.		In.	mm.	In.	mm.
5	.625	15.88	.440	11.18	.825	20.96	.093	2.36	.3125-.05P-.1L-2A	.246	6.25	.320	8.13
6	.725	18.42	.530	13.46	.950	24.13	.093	2.36	.3750-.05P-.1L-2A	.286	7.26	.375	9.53
7	.800	20.32	.600	15.24	1.050	26.67	.093	2.36	.4375-.05P-.1L-2A	.391	9.93	.480	12.19
8	.850	21.59	.650	16.51	1.125	28.58	.093	2.36	.5000-.05P-.1L-2A	.443	11.25	.540	13.72
9	.950	24.13	.750	19.05	1.250	31.75	.093	2.36	.5625-.05P-.1L-2A	.498	12.65	.600	15.24



Shell Size	Ø R	
	In.	mm.
5	.350	8.89
6	.390	9.91
7	.500	12.70
8	.560	14.22
9	.620	15.75

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Pre-Wired Jam Nut Receptacle Connectors

811-003-07 and 811-004-07

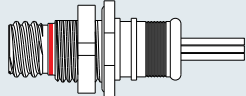
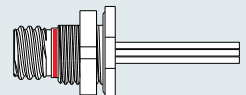
Jam Nut Pigtail Receptacles



Series 811 Mighty Mouse High Density rear panel mount jam nut receptacles feature damage-resistant double-start ACME mating threads. These receptacles are factory-terminated to insulated wire and backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose Type K general purpose Teflon® wire or Type J lightweight space-grade Tefzel® wire. 3A current rating, 600 VAC dielectric withstanding voltage.

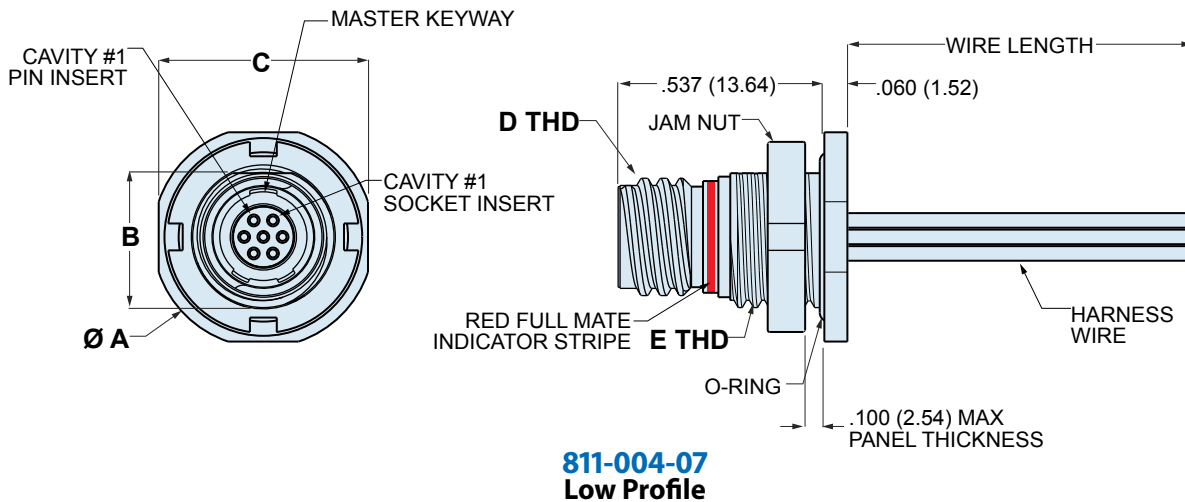
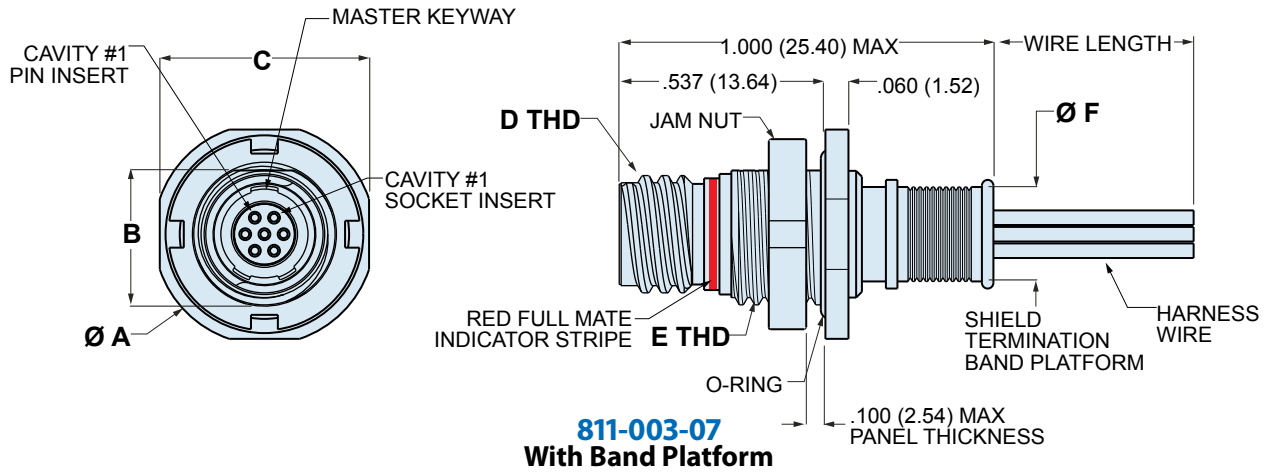
HOW TO ORDER SERIES 811 JAM NUT PIGTAIL RECEPTACLES

Sample Part Number

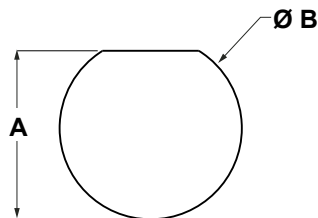
811-003-07	MT	5-7	P	A	6	K	7	-18
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	Wire Size	Wire Type	Wire Color	Wire Length (Inches)
 <p>811-003-07 Panel Mount Jam Nut Receptacle Connector with Band Platform for Shield Attachment or Overmolding</p>	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	6 #26	K PTFE insulation, silver-coated, 200°C, (M22759/11)	1 White	12 18 36 72
	MT Nickel-PTFE ZR Black Zinc-Nickel	6-12 12 Contacts 7-22 22 Contacts 8-30 30 Contacts 9-42 42 Contacts	S Socket Contacts	Alternate Key Positions B C D E F	8 #28 0 #30 (Wire Type J only)	J Tefzel® insulation, high strength lightweight silver-coated, 200°C, (M22759/33)	5 Color code per MIL-STD-681 (striped) 7 10 Solid colors, repeating	Specify any length from 2 inches to 144 inches
 <p>811-004-07 Low Profile Panel Mount Jam Nut Receptacle Connector with No Band Platform</p>								

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD)
Pre-Wired Jam Nut Receptacle Connectors
811-003-07 and 811-004-07



DIMENSIONS										
Shell Size	Ø A		B		C		D Thread	E THD UN-2A	Ø F	
	In.	mm.	In.	mm.	In.	mm.			In.	mm.
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.375-28	.246	6.25
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28	.286	7.26
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.391	9.93
8	.755	19.77	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32	.443	11.25
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.625-28	.498	12.65



PANEL CUTOUT				
Shell Size	A		B Ø	
	In.±.002	mm.±0.05	In.±.002	mm.±0.05
5	.356	9.04	.385	9.78
6	.416	10.57	.447	11.35
7	.542	13.77	.572	14.53
8	.542	13.77	.572	14.53
9	.602	15.29	.635	16.13

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Jam Nut PCB Receptacle Connectors

811-005-07 and 811-006-07 With Straight PC Tails

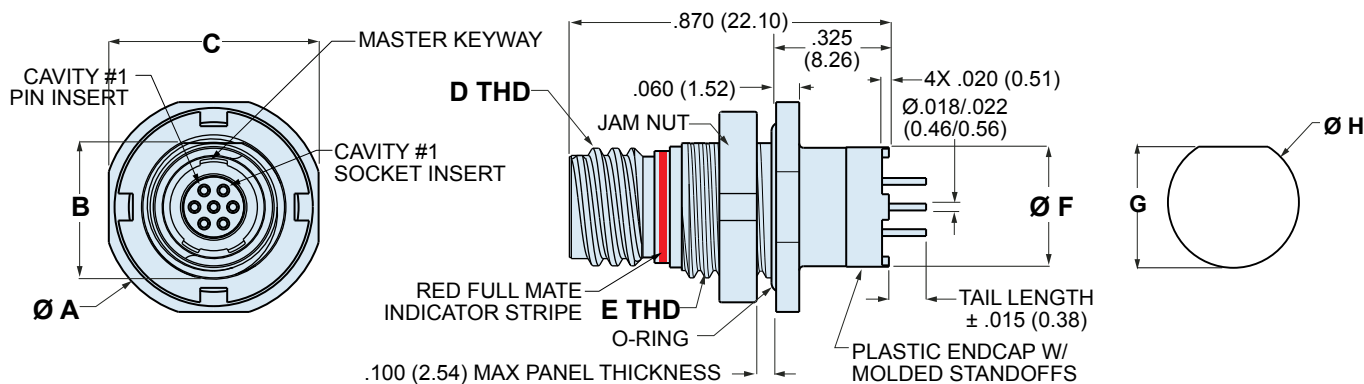


Jam Nut PC Tail Receptacles

Series 811 Mighty Mouse High Density jam nut PCB receptacles have straight PC tails for termination to flex circuits or rigid boards. These receptacles are backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose solder-dipped or gold-plated tails. Select 811-006-07 with enhanced waterblocking for open face (unmated) immersion requirements. Molded plastic endcap has standoffs. 3A current rating, 600 VAC dielectric withstanding voltage.

HOW TO ORDER SERIES 811-005-07 AND 811-006-07 JAM NUT PC TAIL RECEPTACLES

Sample Part Number						
811-005-07	MT	5-7	P	A	3	-.125
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	PC Tail Finish	PC Tail Length
811-005-07 Series 811 Rear Panel Mount Jam Nut Receptacle, Straight PC Tails, Standard Epoxy Sealing	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	3 Solder-Dipped in 63/37 Tin-Lead	.090 .125 .250
811-006-07 Series 811 Rear Panel Mount Jam Nut Receptacle, Straight PC Tails, Enhanced Waterblocking for Open Face (Unmated) Water Immersion	MT Nickel-PTFE ZR Black Zinc-Nickel	6-12 12 Contacts 7-22 22 Contacts 8-30 30 Contacts 9-42 42 Contacts	S Socket Contacts	B C D E F	4 Gold Plated	(Other lengths are readily available)



DIMENSIONS										PANEL CUTOUT					
Shell Size	Ø A		B		C		D Thread	E THD UN-2A	Ø F		Shell Size	G		H Ø	
	In.	mm.	In.	mm.	In.	mm.			In.	mm.		In.±.002	mm.±0.05	In.±.002	mm.±0.05
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.375-28	.350	8.89	5	.356	9.04	.385	9.78
6	.635	16.13	.410	10.41	.602	15.29	.3750-.05P-.1L-2A	.4375-28	.490	12.45	6	.416	10.57	.447	11.35
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.600	15.24	7	.542	13.77	.572	14.53
8	.755	19.77	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32	.670	17.02	8	.542	13.77	.572	14.53
9	.830	21.08	.596	15.14	.791	20.09	.5625-.05P-.1L-2A	.625-28	.770	19.56	9	.602	15.29	.635	16.13

Dimensions in Inches (millimeters) are subject to change without notice.

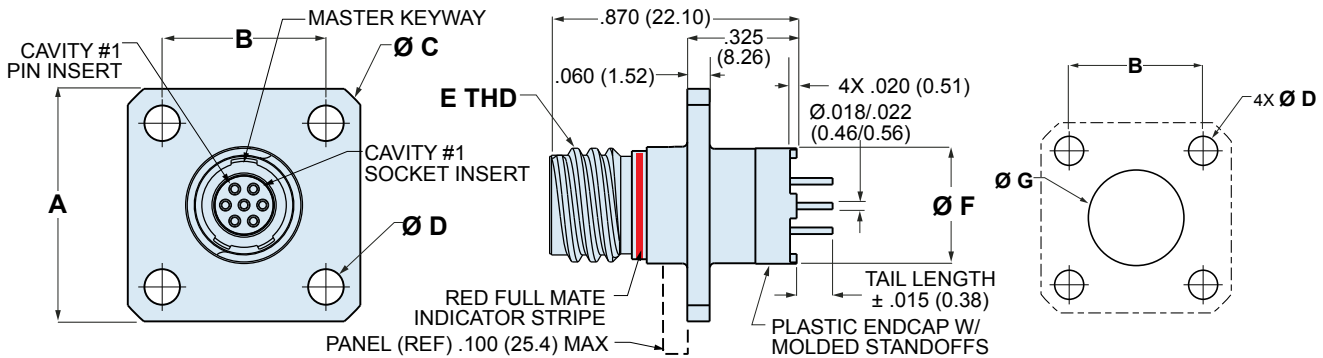
**Series 811 Mighty Mouse High Density (HD)
Square Flange PCB Receptacle Connectors**
811-005-02 and 811-006-02 With Straight PC Tails



Square Flange PC Tail Receptacles

Series 811 Mighty Mouse High Density jam nut PCB receptacles have straight PC tails for termination to flex circuits or rigid boards. These receptacles are backpotted with epoxy. The TwistPin contact system meets requirements of MIL-DTL-83513 and provides outstanding resistance to high levels of shock and vibration. Choose solder-dipped or gold-plated tails. Select 811-006-02 with enhanced waterblocking for open face (unmated) immersion requirements. Molded plastic endcap has standoffs. 3A current rating, 600 VAC dielectric withstanding voltage.

HOW TO ORDER SERIES 811-005-02 AND 811-006-02 SQUARE FLANGE PC TAIL RECEPTACLES						
Sample Part Number						
811-005-02	MT	5-7	P	A	3	-.125
Series	Shell Material and Finish	Shell Size - Insert Arr.	Contact Type	Key Position	PC Tail Finish	PC Tail Length
811-005-02 Series 811 Rear Panel Mount Square Flange Receptacle, Straight PC Tails, Standard Epoxy Sealing	ME Electroless Nickel	5-7 7 Contacts	P Pin Contacts	A Normal	3 Solder-Dipped in 63/37 Tin-Lead	.090 .125 .250
811-006-02 Series 811 Rear Panel Mount Square Flange Receptacle, Straight PC Tails, Enhanced Waterblocking for Open Face (Unmated) Water Immersion	MT Nickel-PTFE	6-12 12 Contacts	S Socket Contacts	Alternate Key Positions B C D E F	4 Gold Plated	(Other lengths are readily available)
	ZR Black Zinc-Nickel	7-22 22 Contacts				
		8-30 30 Contacts				
		9-42 42 Contacts				



DIMENSIONS											
Shell Size	A Square		B Square		Ø C		Ø D		E Thread	Ø F	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.		In.	mm.
5	.625	15.88	.440	11.18	.825	20.96	.093	2.36	.3125-.05P-.1L-2A	.350	8.89
6	.725	18.42	.530	13.46	.950	24.13	.093	2.36	.3750-.05P-.1L-2A	.490	12.45
7	.800	20.32	.600	15.24	1.050	26.67	.093	2.36	.4375-.05P-.1L-2A	.600	15.24
8	.850	21.59	.650	16.51	1.125	28.58	.093	2.36	.5000-.05P-.1L-2A	.670	17.02
9	.950	24.13	.750	19.05	1.250	31.75	.093	2.36	.5625-.05P-.1L-2A	.770	19.56

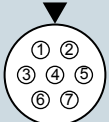
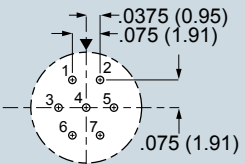
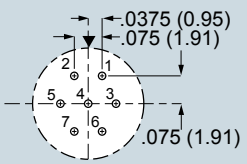
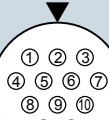
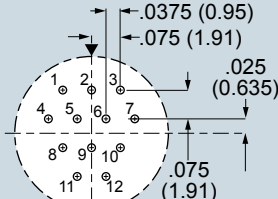
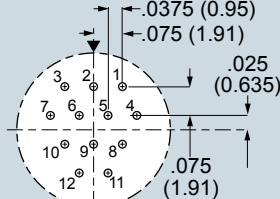
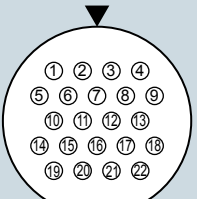
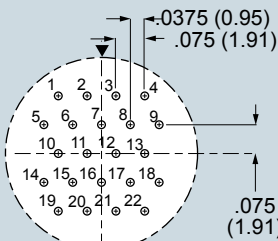
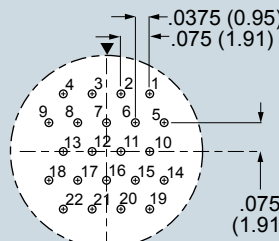
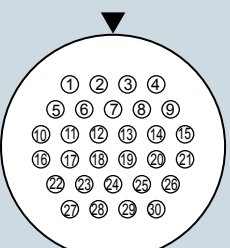
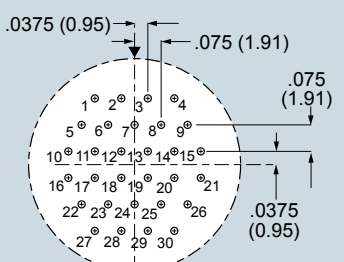
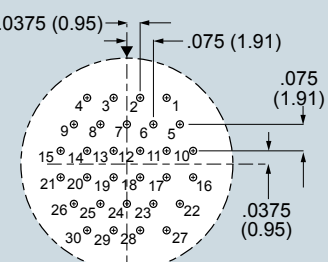
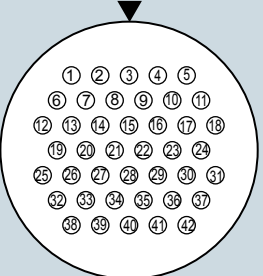
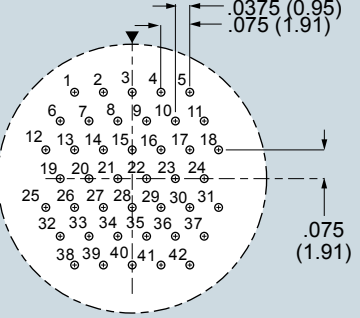
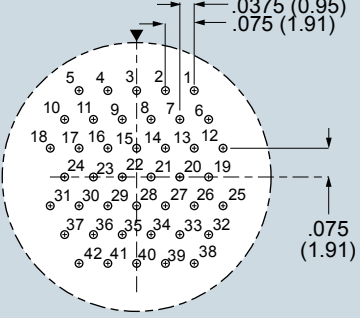
PANEL CUTOUT		
Shell Size	Ø G	
	In.	mm.
5	.360	9.14
6	.410	10.41
7	.520	13.21
8	.570	14.48
9	.660	16.76

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD)
PCB Receptacle Connector Hole Patterns
811-005 and 811-006

Component Mounting Side of PCB

 <p>Pin Insert Engaging Face 5-7</p>	 <p>Pin Connector</p>	 <p>Socket Connector</p>
 <p>Pin Insert Engaging Face 6-12</p>	 <p>Pin Connector</p>	 <p>Socket Connector</p>
 <p>Pin Insert Engaging Face 7-22</p>	 <p>Pin Connector</p>	 <p>Socket Connector</p>
 <p>Pin Insert Engaging Face 8-30</p>	 <p>Pin Connector</p>	 <p>Socket Connector</p>
 <p>Pin Insert Engaging Face 9-42</p>	 <p>Pin Connector</p>	 <p>Socket Connector</p>

Series 811 Mighty Mouse High Density (HD)
Harsh Environment Cordsets
811-007



Harsh Environment Cordsets



Overmolded Series 811 cordsets withstand abrasion and chemical exposure. Cable construction features silver coated stranded conductors with TFE insulation, tinned copper braid shield and extruded black polyurethane jacket. Choose single-ended pigtails or double-ended "back-to-back" cables. Semi-rigid polyamide overmold provides strain relief and environmental sealing.

- Tough polyurethane jacket, low-smoke, zero halogen
- Water-resistant to 1 meter
- 100% electrically tested
- Shielded with 90% minimum tinned copper braid
- Straight or right angle
- Easy to order, quick delivery

HOW TO ORDER SERIES 811-007 CORDSETS

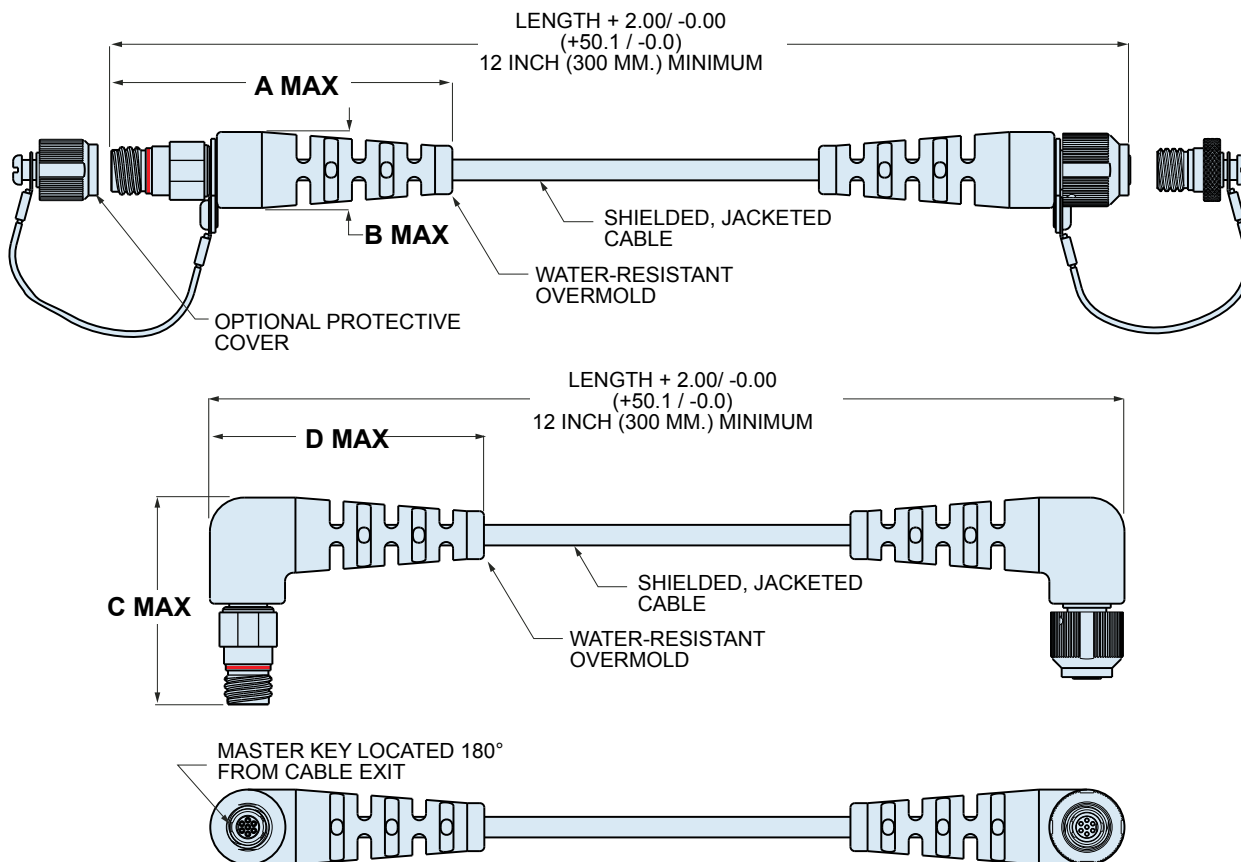
Sample Part Number										
811-007	-A	S	C	S	6	MT	5-7	P	A	-60
Series	End "A" Connector	End "A" Config.	End "B" Connector	End "B" Config.	Wire Size	Shell Finish	Layout	Protective Cover	Key Pos.	Length in Inches
811-007 Series 811 Overmolded Cordset	-A Plug with Female Socket Contacts	S Straight	A Plug with Female Socket Contacts	S Straight	6 #26 AWG	ME Electroless Nickel	5-7 7 Contacts	P Metal Protective Covers Included	A Normal	Overall Length in Inches (12 Inch Minimum)
	-B Plug with Male Pin Contacts	R Right Angle	B Plug with Male Pin Contacts	R Right Angle		MT Nickel PTFE	6-12 12 Contacts	N No Protective Covers	Alternate Key Positions	
	-C Receptacle with Male Pin Contacts		C Receptacle with Male Pin Contacts			ZR Black Zinc Nickel	7-22 22 Contacts		B C D E F	
	-D Receptacle with Female Socket Contacts		D Receptacle with Female Socket Contacts				8-30 30 Contacts			
			N No Connector (Single- Ended Pigtail)				9-42 42 Contacts			

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Harsh Environment Cordsets

811-007



Shell Size	DIMENSIONS							
	A Max.		B Max.		C Max.		D Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
5	2.50	63.5	0.60	15.3	2.20	55.9	1.50	38.1
6	2.50	63.5	0.60	15.3	2.20	55.9	1.50	38.1
7	2.50	63.5	0.70	17.8	2.40	61.0	1.50	38.1
8	2.60	66.0	0.75	19.1	2.50	63.5	1.60	40.7
9	2.90	73.7	0.85	21.6	2.70	68.6	1.90	48.3

SERIES 811 CORDSET SPECIFICATIONS	
Cable Jacket Material	Thermoplastic Polyurethane, Black, Low-Smoke, Zero-Halogen
Cable Shield	Tin-Coated Copper Braid, 90% Minimum Coverage
Conductors	Silver Coated Stranded Wire, TFE Insulated, Per M22759/11
BAND-IT® Shield Termination Band	Stainless Steel
Current Rating	3 A.
Test Voltage (Dielectric Withstanding Voltage)	600 VAC Sea Level
Insulation Resistance	200 megohms minimum
Operating Temperature	-30° C. to +105° C.
Solvent Resistance, Polyamide Overmold	Excellent Resistance to Most Solvents, Fuels, and Oils; Poor Resistance to Strong Acids and Bipolar Solvents (Alcohol)
Shielding Effectiveness	50 dB minimum from 100MHz to 1000MHz.

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD)
Metal Protective Covers
667-347 and 667-218



Protect Connectors From Damage



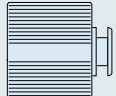
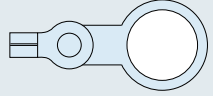
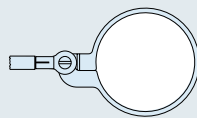
Machined aluminum covers have rubber gaskets for a watertight fit.

Stainless Steel Fittings and Rings Choose small diameter eye fittings for panel attachment. Larger rings fit under the jam nut or over cable jackets. Split rings can be installed on fully assembled cables.

Polyurethane-Coated SST Wire Rope

offers high strength, excellent abrasion resistance and good flexibility. Or, choose Teflon® jacket for high temperature exposure.

Braided Nylon Rope provides excellent flexibility and good abrasion resistance, and can be ordered with slip knot fittings for easy installation on any size cable.

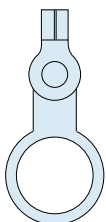
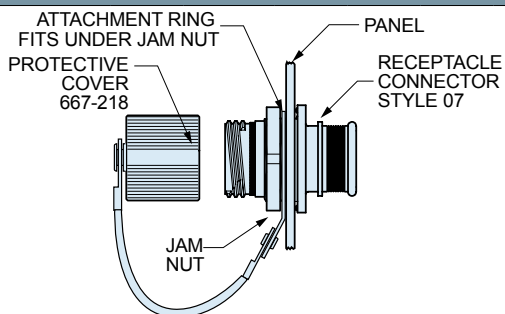
HOW TO ORDER					
Sample Part Number					
667-347	-M	-G	9	04	-6
Series	Shell Material / Finish	Attachment Type	Shell Size	Attachment Code	Attachment Length in Inches
 667-347 Protective Cover for use with Series 811 Plugs	ME Aluminum / Electroless Nickel RoHS Compliant MT Aluminum / Nickel-PTFE RoHS Compliant ZR Aluminum / Zinc-Nickel with Black Chromate	-G Nylon Rope -H SST Wire Rope, Teflon® Jacket -N No Attachment -S SST Sash Chain -SK Nylon Rope With Slip Knot -T SST Wire Rope, No Jacket -U SST Wire Rope, Polyurethane Jacket "SST" = Stainless Steel	5 6 7 8 9	Omit for attachment Types N (No Attachment) and SK (Slip Knot)	Omit for attachment Type N (No Attachment) Example "-6" equals six inch length
				 Small Ring	
 667-218 Protective Cover for use with Series 811 Receptacles				 Large Ring	14 - .385 (9.78) I.D. 15 - .445 (11.30) I.D. 16 - .570 (14.48) I.D. 17 - .635 (16.13) I.D. 18 - .695 (17.65) I.D. 19 - .885 (22.48) I.D. 20 - 1.070 (27.17) I.D. 21 - 1.135 (28.83) I.D. 22 - 1.210 (30.73) I.D. 23 - 1.275 (32.39) I.D. 24 - 1.375 (34.94) I.D.
					 Split Ring

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Metal Protective Cover Dimensions and Attachments 667-347 and 667-218

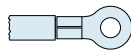
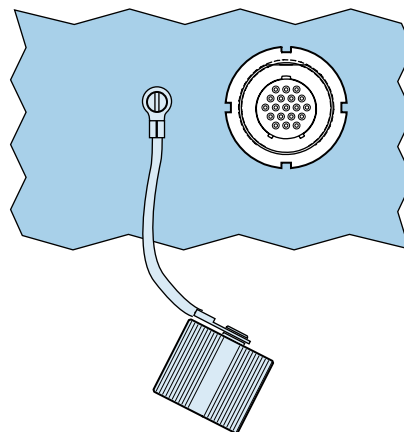
Attaching a 667-218 Receptacle Cover to a Rear Panel Mounted Jam Nut Receptacle



Solid Ring

Dia. Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
14	5	±.010	±0.25	±.015	±0.38
15	6	.385	9.78	.510	12.95
16	7, 8	.445	11.30	.565	14.35
17	9	.570	14.48	.685	17.40
18	10	.635	16.13	.760	19.30
19	13	.695	17.65	.820	20.82
20	16	.885	22.48	1.010	25.65
21	17	1.070	27.17	1.195	30.35
24	21	1.135	28.83	1.250	31.75
		1.375	34.93	1.490	37.85

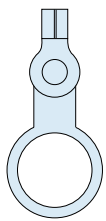
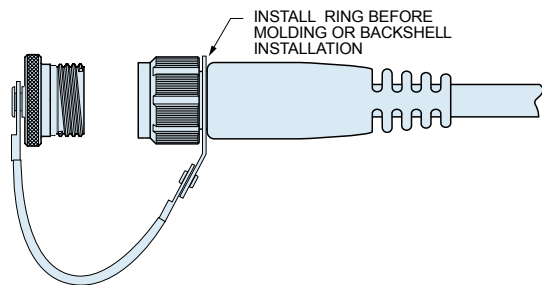
Attaching a Cover to a Panel With a Screw



Small Ring for Attaching Receptacle Covers to a Panel with a Screw

Dia. Code	Screw Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
01	#4, M3	±.005	±0.13	Max.	Max.
02	#6	.126	3.20	.31	7.9
04	#8, M4	.145	3.68	.31	7.9
06	#10	.188	4.78	.31	7.9
		.197	5.00	.31	7.9

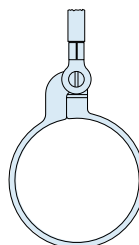
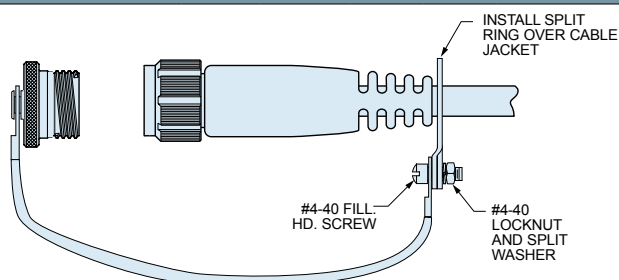
Attaching a Cover to a Cable Assembly with a Solid Ring



Solid Ring

Dia. Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
14	5,6	±.010	±0.25	±.015	±0.38
15	7	.385	9.78	.510	12.95
16	8, 9	.445	11.30	.565	14.35
18	10, 13	.570	14.48	.685	17.40
20	16, 17	.635	16.13	.760	19.30
22	21	.695	17.65	.820	20.82
		1.070	27.17	1.195	30.35
		1.210	30.73	1.312	33.32

Attaching a Cover to a Cable Using a Split Ring

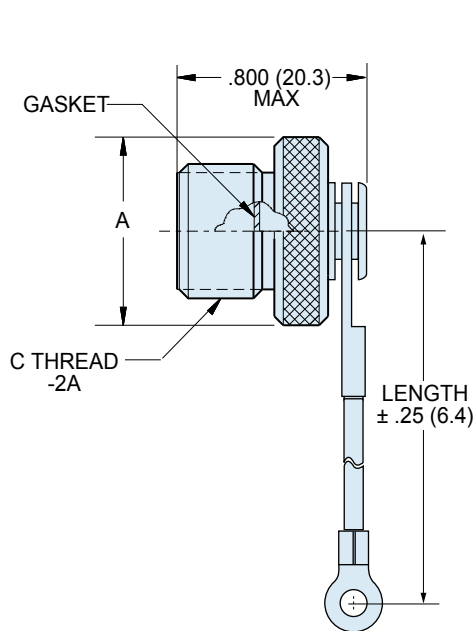


Large Split Ring for Attaching Covers to Cables

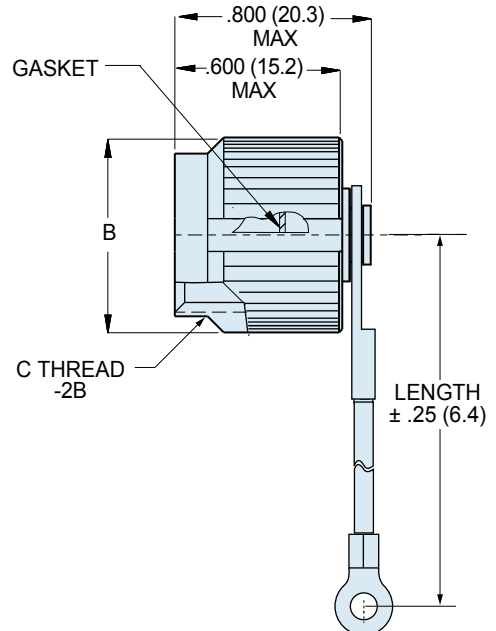
Dia. Code	Max. Cable Dia. (in.)	Ring Diameter			
		Min. ID		Max. OD	
		In.	mm.	In.	mm.
50	.410	.420	10.67	.580	14.73
52	.470	.480	12.19	.640	16.26
54	.625	.635	16.13	.796	20.22
56	.735	.745	18.92	.905	22.99
58	.875	.885	22.48	1.046	26.57
60	1.000	1.010	25.65	1.171	29.74
64	1.115	1.125	28.58	1.285	32.64
68	1.335	1.345	34.16	1.505	38.23

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD)
Metal Protective Cover
Dimensions and Attachments
667-347 and 667-218








667-347 Plug Cover



667-218 Receptacle Cover

Dimensions					
Shell Size	A Max.		B Max.		C
	In.	mm.	In.	mm.	
5	.465	11.81	.488	12.40	.3125-.05P-1L
6	.525	13.34	.555	14.10	.375-.05P-1L
7	.590	14.99	.615	15.62	.4375-.05P-1L
8	.653	16.59	.675	17.15	.5000-.05-.1L
9	.715	18.16	.840	21.34	.5625-.05P-.1L

Materials and Finishes	
Cover	Aluminum alloy or stainless steel
Gasket	Silicone rubber
Wire, Hardware	Stainless steel, passivated

Lanyard Options	
 Nylon Rope	-55° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter
 Polyurethane Coated Wire Rope	Black polyurethane over stainless steel rope, -55° to +125°C., very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" (2mm) diameter
 Teflon® Jacketed Wire Rope	Translucent FEP jacket over stainless steel, -55° to +200°C., fair flexibility, good abrasion resistance, .100" diameter
 Sash Chain	Stainless steel, #8 chain, .240" (6mm)
 Slip Knot (SK) for Attaching Covers to Cable	55° to +100°C., black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter. Length includes .5" (13mm) diameter loop.

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Rubber Protective Covers 809-190 and 809-191

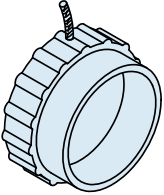
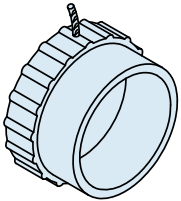

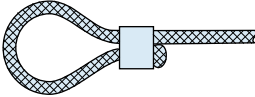

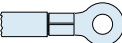
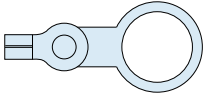


These *splashproof molded rubber covers* fit all Series 811 plugs and receptacles. Braided black nylon lanyard is available with metal rings, cable tie or slipknot for attachment to panel or to cable. -40° to +120° C operating temperature, fungus resistant per MIL-STD-810G Method 508.6.

Materials	
Cover	Neoprene rubber blend, black
Lanyard	.062" (1.57) diameter nylon cord, black
Cable Tie	6/6 nylon, black, SST locking tab
Ring	Stainless steel, black zinc-cobalt finish
Crimp Sleeve	Copper Alloy, black zinc-cobalt finish

HOW TO ORDER

Sample Part Number

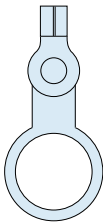
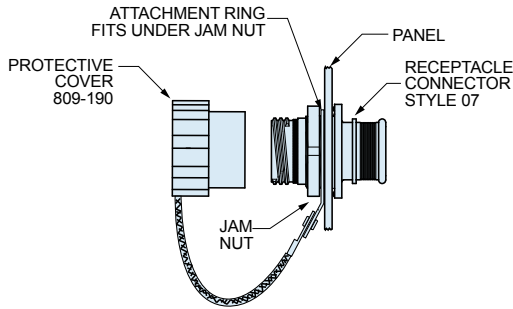
809-191	- 05	G	6	- SCS	C
Series	Shell Size	Lanyard Type	Lanyard Length	Attachment Code	Conductive Rubber
 <p style="text-align: center;">809-190 Protective Cover for use with Series 811 Receptacles</p>  <p style="text-align: center;">809-191 Protective Cover for use with Series 811 Plugs</p>	<p style="text-align: center;">-05 -06 -07 -08 -09</p>	<p style="text-align: center;">-G Nylon Rope (Omit for no lanyard)</p>	<p style="text-align: center;">Length in Inches</p>	 <p style="text-align: center;">-WS Nylon Cable Tie, 1.77 Inch (45mm) Maximum Wire Bundle Diameter</p>	<p style="text-align: center;">Omit for Standard Neoprene</p> <p style="text-align: center;">C Conductive Rubber</p>
				 <p style="text-align: center;">-SCS Adjustable Slip Knot with Crimp Sleeve. The sleeve can be crimped with pliers for a permanent attachment.</p>	
				 <p style="text-align: center;">-00 Lanyard With No Attachment (Fused End)</p>	
				Lug Terminals and Rings	
 <p style="text-align: center;">Lug Terminal</p>	<p style="text-align: center;">-01 - .126 (3.20) I.D. -02 - .145 (3.68) I.D. -06 - .188 (4.78) I.D. -07 - .197 (5.00) I.D.</p>				
 <p style="text-align: center;">Solid Ring</p>	<p style="text-align: center;">-08 - .385 (9.78) I.D. -09 - .445 (11.30) I.D. -10 - .516 (13.11) I.D. -11 - .570 (14.48) I.D. -12 - .583 (14.81) I.D. -13 - .635 (16.13) I.D. -14 - .695 (17.65) I.D. -15 - .776 (19.71) I.D. -16 - .885 (22.48) I.D. -17 - .896 (25.76) I.D. -18 - 1.015 (25.78) I.D. -19 - 1.070 (27.18) I.D. -20 - 1.135 (28.83) I.D. -21 - 1.141 (28.98) I.D.</p>				

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD) Rubber Protective Cover Dimensions and Attachments 809-190 and 809-191



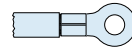
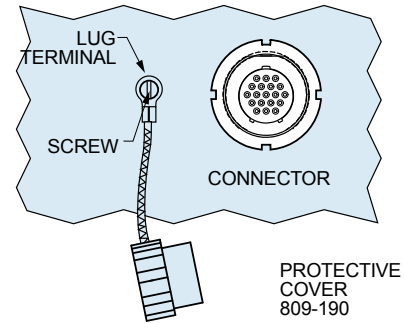
Attaching a 809-190 Receptacle Cover to a Rear Panel Mounted Jam Nut Receptacle



Solid Ring

Dia. Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
		± .010	±0.25	± .015	± 0.38
08	5	.385	9.78	.510	12.95
09	6	.445	11.30	.565	14.35
11	7, 8	.570	14.48	.685	17.40
13	9	.635	16.13	.760	19.30

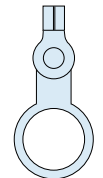
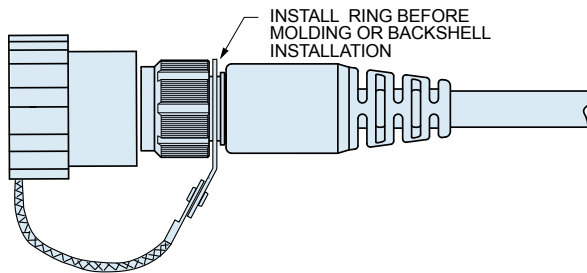
Attaching a Cover to a Panel with a Screw



Lug Terminal for Attaching Receptacle Covers to a Panel with a Screw

Dia. Code	Screw Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
		±.005	±0.13	Max.	Max.
01	#4, M3	.126	3.20	.31	7.9
02	#6	.145	3.68	.31	7.9
06	#8, M4	.188	4.78	.31	7.9
07	#10	.197	5.00	.31	7.9

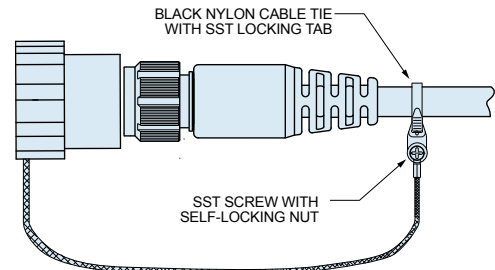
Attaching a Cover to a Cable Assembly with a Solid Ring



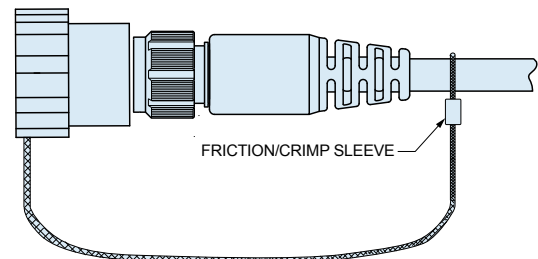
Large Ring

Dia. Code	Shell Size	Ring I.D.		Ring O.D.	
		In.	mm.	In.	mm.
		± .010	±0.25	± .015	± 0.38
08	5,6	.385	9.78	.510	12.95
09	7	.445	11.30	.565	14.35
11	8, 9	.570	14.48	.685	17.40

Attaching a Cover to a Cable Assembly with Type WS Cable Tie



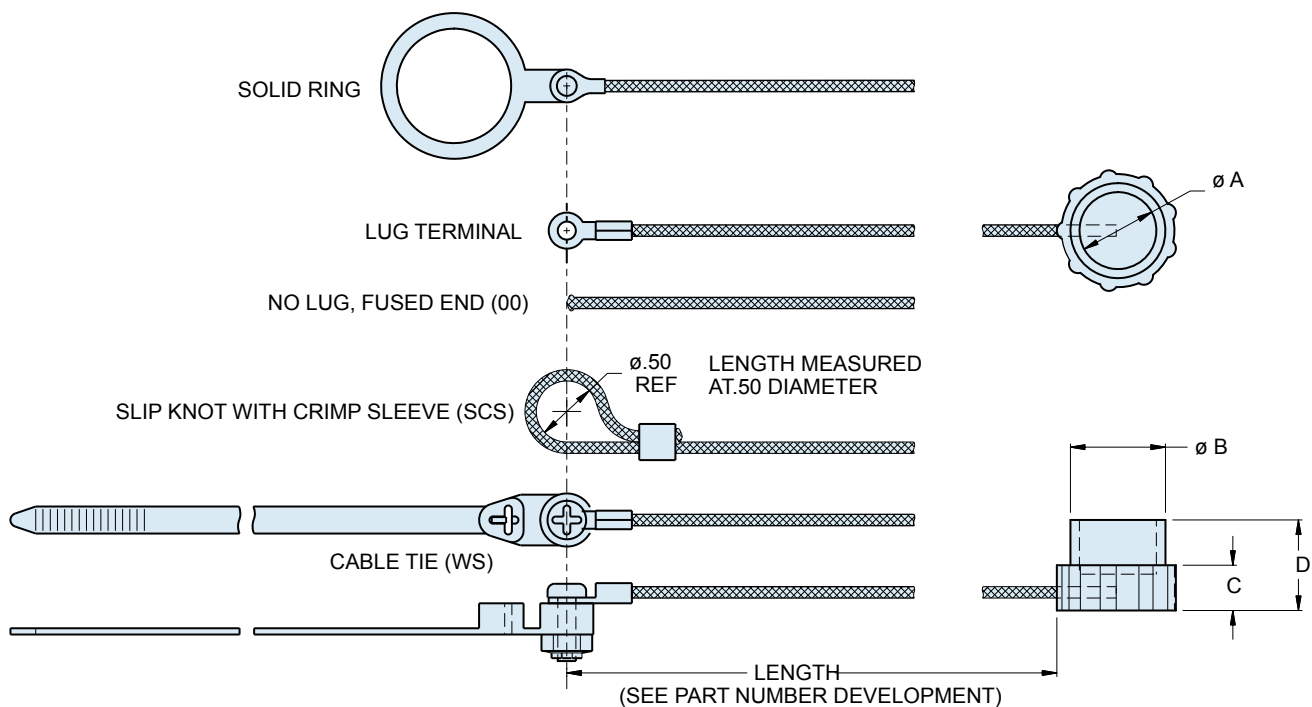
Attaching a Cover to a Cable Assembly with Type SCS Slip Knot



Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Rubber Protective Cover Dimensions and Attachments 809-190 and 809-191



809-190 Receptacle Cover								
Shell Size	Ø A		Ø B		C		D	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
05	.28	7.1	.41	10.4	.31	7.9	.62	15.7
06	.35	8.9	.47	11.9	.31	7.9	.62	15.7
07	.41	10.4	.53	13.5	.31	7.9	.62	15.7
08	.47	11.9	.60	15.2	.31	7.9	.62	15.7
09	.53	13.5	.66	16.8	.31	7.9	.62	15.7

809-191 Plug Cover								
Shell Size	Ø A		Ø B		C		D	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
05	.51	13.0	.70	17.8	.375	9.5	.875	22.2
06	.57	14.5	.76	19.3	.375	9.5	.875	22.2
07	.66	16.8	.85	21.6	.375	9.5	.875	22.2
08	.72	18.3	.91	23.1	.375	9.5	.875	22.2
09	.78	19.8	.97	24.6	.375	9.5	.875	22.2

Dimensions in Inches (millimeters) are subject to change without notice.

Shrink Boots – Straight and Right Angle for Series 811 Connectors



Protect Your Cable Harness with heat-shrinkable boots. These easy-to-use boots provide excellent electrical, mechanical and environmental protection. Heating the boot causes the boot to shrink onto the connector and cable. An optional adhesive lining bonds the boot to the connector and cable and fills small gaps for a complete seal. Choose straight cable exit or right angle exit. These lipped boots attach directly to Series 811 Mighty Mouse HD connectors with integral band platform. After shrinking, the boot lip locks into groove. Choose Type 1 high performance elastomer for extreme temperatures and excellent resistance to fuels and oils, Type 2 non-halogenated flame-retardant polyolefin for use where limited fire hazard is required.

Material Selection Guide

Attribute	Type 1 High Performance Semi-Rigid Elastomer	Type 2 Zero Halogen Semi-Rigid Polyolefin
Continuous Operating Temp.	-75° to +150°C	-30° to +125°C
Resistance to Fuels, Oils	Excellent	Very Good
Low Toxicity, Zero Halogen	No	Yes

Type 1 High performance Elastomer

Semi-rigid high performance boots combine excellent resistance to fuels, oils and solvents with superior performance at extreme temperatures. Rated for 3000 hours continuous operation at +150° C, these boots fit most standard boot adapters for circular connectors. Material meets the requirements of VG95343 Type 6, BSG 198-5-DE, EN62329-102 and SAE AS5258 Type H. These boots are recommended for demanding applications such as military vehicles and petrochemical exploration. Black color.

Type 2 Zero halogen

Halogen-free polyolefin boots meet low smoke and toxicity requirements of shipboard, transit and aircraft systems. These Low Smoke/Zero Halogen (LSZH) boots fit most standard shrink boot adapters, including M85049 types along with Glenair Series 31 and Series 44 adapters. Oxygen index greater than 30%, smoke index less than 20, and toxicity index under 3 per 100 grams. Material meets requirements of NAVSEA 5617649, VG95343 Part 29, BSG 198-5-DF, EN62329-101 and SAE AS5258 Type G. Good resistance to oils, fuels and solvents. These boots provide strain relief and environmental protection to connector/cable transitions. Temperature rating -30° to +125° C. Black color.

Dimensions in Inches (millimeters) are subject to change without notice.



Series 811 Mighty Mouse High Density (HD) Shrink Boots Boot Material Properties

Adhesive Lined Boot Material Properties

Heat-shrink boots are not watertight unless equipped with factory-installed or user-installed adhesives. When heat is applied to the boot, the adhesive melts and fixes the boot to the adapter and cable jacket to provide the necessary sealing as well as mechanical strain-relief. Hot melt thermoplastic polyamide adhesive is compatible with most cable jackets, economical and easy to install.

Shrink Boot Typical Material Properties

Property	Type 1 High Performance Elastomer	Type 2 Zero Halogen Polyolefin
Flexibility	Semi-rigid	Semi-flexible
Operating Temperature Range	-75°C to +150°C	-30°C to +135°C
Shrink Temperature (min.)	135°C	135°C
Tensile Strength (psi)	1700	1100
Elongation (% min.)	400	250
Long Term Heat Aging	3000 hrs, 150°C	3000 hrs, 135°C
Heat Shock	4 hrs, 215°C	4 hrs, 215°C
Heat Aging	168 hrs, 160°C	168 hrs, 160°C
Dielectric Strength (V/mil)	300	380
Volume Resistivity (ohms-cm)	10 ¹³	10 ¹²
Water Absorption (%)	0.5	0.5
Flammability	Burn Time <15 sec Burn Length <25mm	Burn Time <15 sec Burn Length <25mm
RoHS Compliant	Yes	Yes
Oxygen Index (% min.)		30
Temperature Index (°C)		250
Smoke Index (max.)		20
Toxicity Index (max.)		3

Shrink Boot Fluid Resistance

Fluid	Type 1 High Performance Elastomer	Type 2 Zero Halogen Polyolefin
Lubricating Oil	Very good	Good
Hydraulic Fluid	Very Good	Good
Aviation Fuel	Very Good	Good
Gasoline	Very Good	Fair
De-Icing Fluid	Excellent	Very Good
Automotive Diesel	Good	Fair

W1 Adhesive Properties

Attribute	W1 High Temperature Hot Melt Adhesive
Boot Material Compatibility	Type 1, 2, 5, 6 and 7
Continuous Operating Temp.	-55° to +125°C
Resistance to Fuels, Oils & Fluids	Good
Low Toxicity, Zero Halogen	Yes

Material Color Options for Type 1 High Performance Elastomer Only Add Optional Color Mod Code to End of Any Type 1 Material Part Number

Mod Code	Color	Similar to (Reference)	Mod Code	Color	Similar to (Reference)
632 B	Blue	PANTONE 3005U	632 R	Red	PANTONE 1797U
632 E	Grey	FED-STD-595; #36270	632 T	Tan	FED-STD-595; #33446
632 G	Green	PANTONE 355U	632 W	White	FED-STD-595; #37875
632 P	Purple	FED-STD-595; #37100	632 Y	Yellow	PANTONE YELLOW U
632 O	Orange	FED-STD-595; #32300	Standard	Black	FED-STD-595; #37038

Series 811 Mighty Mouse High Density (HD)
Shrink Boots
809S060 and 809A060



Lipped Straight Shrink Boots – Type I High Performance Elastomer

- -75° C to +150° C
- Excellent resistance to fuels, oils, solvents and heat.



Boot Size	Shell Size	Part Number
	Series 811 Mighty Mouse HD	Pre-Coated with W1 Hi-Temp Hot-Melt Adhesive
1	5	809S060-1
2	6, 7	809S060-2
3	8, 9	809S060-3

Lipped Straight Shrink Boots- Type 2 Zero Halogen, Semi-Rigid

- Low Smoke, Zero Halogen
- Meets U.S. and E.U. toxicity requirements.



Boot Size	Shell Size	Part Number
	Series 811 Mighty Mouse HD	Pre-Coated with W1 Hi-Temp Hot-Melt Adhesive
1	5	809S060-1H
2	6, 7	809S060-2H
3	8, 9	809S060-3H

Lipped Right Angle Boots- Type I High Performance Elastomer

- -75° C to +150° C
- Excellent resistance to fuels, oils, solvents and heat.



Boot Size	Shell Size	Part Number
	Series 811 Mighty Mouse HD	Pre-Coated with W1 Hi-Temp Hot-Melt Adhesive
1*	5	809A060-1
2	6, 7	809A060-2
3	8, 9	809A060-3

* Size 1 right angle boot does not have lip. See drawing on following page.

Lipped Right Angle Shrink Boots- Type 2 Zero Halogen, Semi-Rigid

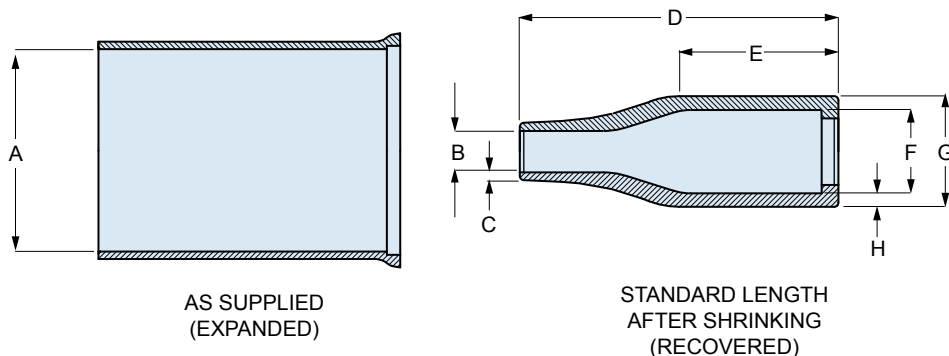
- Low Smoke, Zero Halogen
- Meets U.S. and E.U. toxicity requirements.



Boot Size	Shell Size	Part Number
	Series 811 Mighty Mouse HD	Pre-Coated with W1 Hi-Temp Hot-Melt Adhesive
1*	5	809A060-1H
2	6, 7	809A060-2H
3	8, 9	809A060-3H

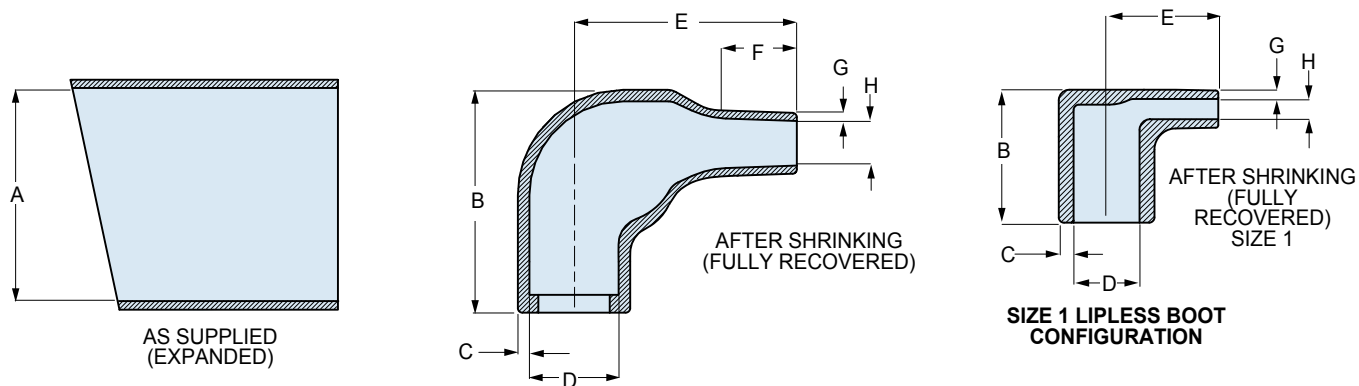
* Size 1 right angle boot does not have lip. See drawing on following page.

Lipped Straight Shrink Boots – Dimensions



Boot Size	A Min.		B Max.		C ± 20%		D ± 10%		E Ref.		F Max.		G Ref.		H ± 30%		J ± 10%	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
1	.354	9.0	.079	2.0	.028	0.7	.984	25.0	.551	14.0	.217	5.5	.295	7.5	.039	1.0	N/A	N/A
2	.669	17.0	.138	3.5	.028	0.7	1.181	30.0	.728	18.5	.276	7.0	.378	9.6	.051	1.3	N/A	N/A
3	.945	24.0	.197	5.0	.035	0.9	1.496	38.0	.748	19.0	.413	10.5	.520	13.2	.063	1.6	1.024	26.0

Lipped Right Angle Shrink Boots- Dimensions



Boot Size	A Min.		B Ref.		C ± 30%		D Max.		E ± 20%		F Ref.		G ± 20%		H Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
1	.354	9.0	.492	12.5	.039	1.0	.236	6.0	.413	10.5	NA	NA	.028	0.7	.079	2.0
2	.669	17.0	.787	20.0	.051	1.3	.315	8.0	.787	20.0	.276	7.0	.028	0.7	.138	3.5
3	.945	24.0	.984	25.0	.063	1.6	.394	10.0	.984	25.0	.394	10.0	.035	0.9	.197	5.0

Dimensions in Inches (millimeters) are subject to change without notice.

Series 811 Mighty Mouse High Density (HD)
Contacts and Tools
Band-Master™ Advanced Termination System
Bands and instructions



Glenair Band-Master™ Advanced Termination System: How To Order



Fast, cost-effective shield termination. Attach cable shields to backshells with **Band-Master™ ATS** stainless steel straps. The **Band-Master™ ATS** system offers fast termination and the flexibility to handle a wide range of parts with just one band size. Approved for aerospace and defense, these straps have successfully passed rigorous shock, vibration and environmental testing.

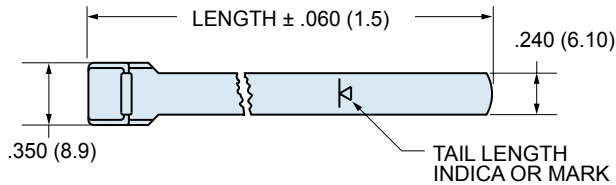
1 Band installation Tool. Use with .240" (6.10 mm) wide bands. 6.75 inches (172 mm) length, 1.2 pounds (0.6 Kg.)

2 Standard Band, .240" (6.10 mm) wide. Available in two lengths, flat or pre-coiled. Stainless steel.

Figure	Description	Part Number
1	Band installation Tool	600-058

Figure	Length		Part Number		Accommodates Diameter	
	in.	mm	Flat	Pre-Coiled	in.	mm
2	14.250	362.1	600-052	600-052-1	1.8	45.7
2	18.000	457.2	600-090	600-090-1	2.5	63.5

Contact Glenair or visit our website (glenair.com) to view our complete line of **Band-Master™ ATS** products, including pneumatic tools for high volume production and calibration kits.



Band-Master™ ATS Shield Termination instructions

1. Prepare Cable Braid for termination process (Figure 1).
2. Push Braid forward over Adapter Retention Lip to the Adapter Incline Point (or .4" [10.2mm] minimum braid length). Milk Braid as required to remove slack and insure a snug fit around the shield termination area (Figure 2).
3. Prepare the Band in the following manner:
IMPORTANT: Due to Connector/Adapter circumference, it may be necessary to prepare the Band around the Cable or Retention Area.
 - A. Roll Band through the Buckle Slot twice. (Bands must be double-coiled.)
 - B. Pull on Band until Mark (▶) is within approximately .250 inch (6.4mm) of Buckle Slot (Figure 3). The Band may be tightened further if desired.

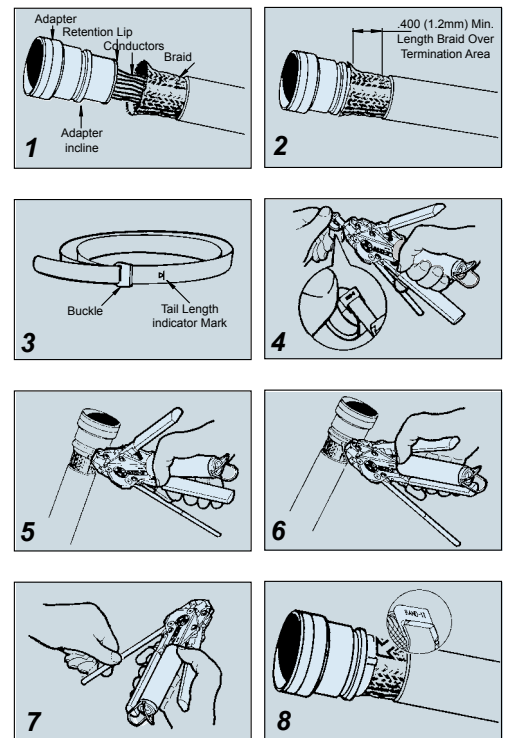
NOTE: Prepared Band should have (▶) Mark visible approximately where shown in Figure 3.

Shield Termination

Clamping Process (Figures 4 thru 8)

NOTE: To free Tool Handles, move Holding Clips to center of Tool.

4. Squeeze Gripper Release Lever and insert Band into the front end opening of the Tool. (NOTE: Circular portion of looped band must always face downward.)
5. Aligning the Band and Tool with the Shield Termination Area, squeeze Black Pull-Up Handle repeatedly using short strokes until it locks against Tool Body. (This indicates the Band is compressed to the Tool Precalibrated Tension.)
NOTE: If alignment of band and shield is unsatisfactory, tension on band can be relaxed by pushing on slotted release lever on top of tool. Make adjustments as necessary and again squeeze black pull-up handle.
6. Complete the Clamping Process by squeezing the Gray Cut-Off Handle.
7. Remove excess band from tool and dispose.
8. inspect Shield Termination.



Dimensions in Inches (millimeters) are subject to change without notice.

HIGH SPEED HIGH BANDWIDTH MINIATURE CONNECTORS FROM GLENAIR

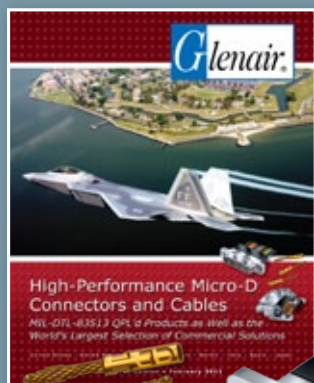
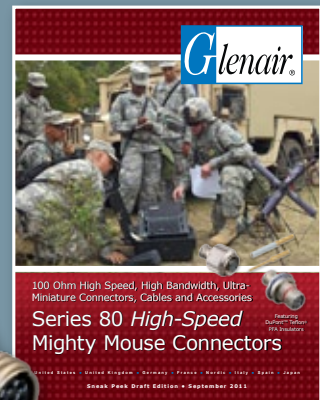


The world's broadest selection of high-speed, high bandwidth interconnect products for mil-aero and other harsh environment applications

Glenair offers a full range of products to solve the most demanding high-speed interconnect challenges—from the size- and weight-saving Mighty Mouse line, to Fiber Optic solutions that address the most demanding high bandwidth and EMI immunity requirements. Many Glenair connector technologies that are suitable for general purpose signal applications also excel in 100 Ohm high-speed differential impedance applications as well as other installations that require low insertion loss, low VSWR and high data-rate performance. These products are tested and capable of delivering benchmarked high-speed performance. Please view these catalogs on our website for additional information

Series 80 "Mighty Mouse" High Speed Connectors

Glenair's revolutionary connector series that reduces interconnect system size and weight by 50% compared to MIL-DTL-38999 connectors. Originally developed as a smaller and lighter alternative to D38999 connectors for aerospace applications, the Mighty Mouse is used on hundreds of mission-critical defense, medical, industrial and geophysical applications. The Mighty Mouse product line includes a broad range of insert arrangements all equipped with special PFA insulators for 100 Ohm high speed, high bandwidth applications. High-speed cordsets, terminated to a broad range of commercial USB and Ethernet interconnects are also available as standard catalog offerings.



MIL-DTL-83513 Micro-D Connectors and Cables

Glenair offers both Military Standard 83513 Micro-D connectors as well as COTS selections, all of which are ready for use in high speed, high bandwidth applications up to 5 GHz with size #26 AWG wire. Our TwistPin contact provides superior performance—especially in vibration and shock applications. Where interconnect failure is simply not an option, the Glenair high-reliability Micro-D offers a wealth of performance benefits which far outweigh any potential cost savings realized by specifying a lesser caliber connector. If downtime is a critical concern, other connectors cannot match the long-term durability and performance advantages of the MIL-DTL-83513 Micro-D.



Fiber Optic Interconnect Solutions

Today, the use of fiber optic systems to carry digitized voice, video, and data is universal. Fiber optic interconnect systems offer exponentially larger bandwidth compared to standard electrical cabling. Glenair manufactures a solution for every branch of the military and every mission-critical commercial application. Glenair's fiber optic offerings include Series #16 AWG Mighty Mouse, QPL MIL-PRF-28876 fiber optic connectors and MIL-DTL-38999 type solutions, the innovative high-density GHD connector system, and the revolutionary Eye-Beam™ expanded-beam lens terminus. The low insertion loss Eye-Beam™ offers comparable performance to standard butt joint termini in a package that's built to withstand rugged use and frequent mating/de-mating in field conditions.

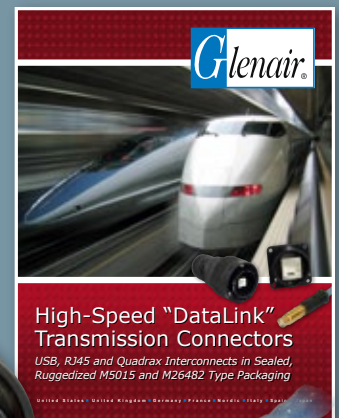


AS39029 Qualified High Performance Contacts

Glenair brings a new perspective to the supply of high-performance crimp, shielded and fiber optic contacts: High Availability! Whether you need a standard duty socket for a MIL-DTL-28840 connector or an extended duty pin for MIL-DTL-38999 Series III, we have you covered with products that are always in stock—with no dollar or quantity minimums. The AS39029 product series supplied by Glenair includes all the most popular standard and extended duty pin and socket contacts for use in high-performance circular and rectangular multi-pin connectors. We are particularly well positioned to supply special-purpose shielded Coaxial, Twinax and Quadrx contacts.

High-Speed Datalink Transmission Connectors

Bridge the gap between high performance data transmission and rugged field-ready circular connectors with Glenair Datalink Transmission Connectors: High-speed serial data connectors and standard duty Ethernet connectors protected with military-grade connector shell packaging. USB, RJ-45 and Quadrx interconnects are integrated inside sealed, ruggedized M5015 and M26482 type connector shells. By integrating the two into a single, refined package, users will no longer have to worry about damaging delicate high bandwidth connections in harsh conditions. The MIL-DTL-5015 or MIL-DTL-26482 type connector shells provide impact resistance, ingress protection and positive coupling—all in a wide array of finishes and shell styles.



Series 79 Micro-Crimp Connectors

Today's defense/aerospace systems require advanced levels of environmental protection, electromagnetic shielding and size/weight reduction. The Series 79 was developed to meet these needs, especially for applications that require higher-density, smaller size and lighter weight than is provided by the venerable D-sub. The Micro-Crimp connector features crimp, rear-release size #23 contacts on .075 inch (1.9 mm) spacing, as well as size #12 and #16 power and coaxial crimp contacts in a range of hybrid layouts. Panel mounted connectors feature conductive sealing gaskets. Right angle printed circuit board connectors have an EMI shroud to prevent electromagnetic interference. Wire sealing grommets and interfacial seals protect circuits from moisture and contamination. Available in 31 insert arrangements, the Micro-Crimp provides a wide selection of arrangements for high-speed data as well as general-duty signal and power transmission.



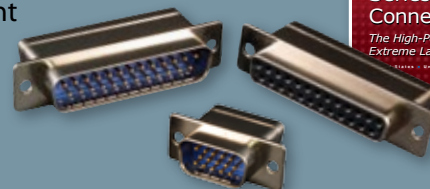
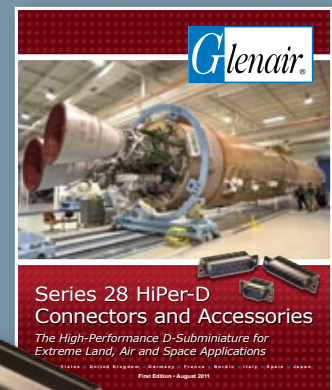
MIL-DTL-38999 Cylindrical Connectors

MIL-DTL-38999 is a high-performance connector family designed for cable-to-panel I/O applications in military aerospace and other demanding situations. Environmental class plugs and receptacles—with high-density insert arrangements (up to 128 contacts)—are available with crimp removable contacts, PC tails, and solder cups. Glenair manufactures both Military Standard MIL-DTL-38999 as well as commercial Hermetic connectors plus EMI/EMP filter versions, standard environmentals, bulkhead feedthroughs, Sav-Con® connector savers and more. All of our D38999 type solutions are available with contacts and insulators optimized for high-speed applications



Series 28 HiPer-D Connectors

Meet the Series 28 HiPer-D. Intermateable and intermountable with standard M24308 type D-Subs, the HiPer-D meets the need for improved performance in hostile environments. Unlike standard M24308 connectors with stamped steel shells, the HiPer-D is machined from aluminum or stainless steel. The dielectric inserts are made with thermoset epoxy for unbeatable resistance to chemicals and are capable of 200°C continuous operating temperature. Aerospace grade fluorosilicone grommets and face seals provide watertight sealing. Integrated grounding fingers provide advanced electromagnetic compatibility. Best of all, the HiPer-D is available in every standard and high-density M24308 layout and is stocked for immediate same-day shipment.



Visit us at www.glenair.com and use the literature order form for immediate catalog fulfillment

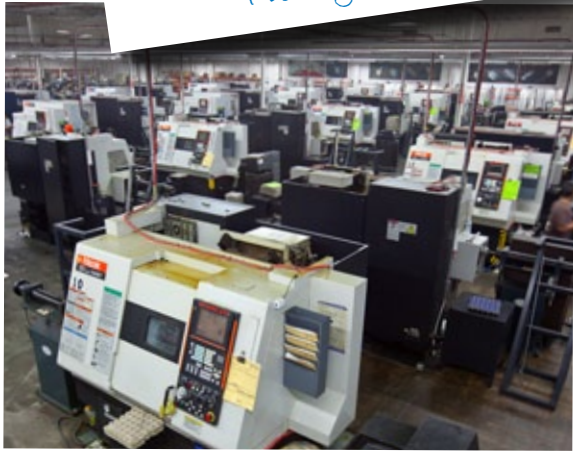
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Plenty of Raw Materials!



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Huge "Same-Day" Inventory!

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