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**Search Results for:** Bulkhead Feedthrough Cable Jack — Flexible Cable

*Please note: Images are for reference only*



**Part Number:** 142191  
**Family/Series:** SMB/SMC Coaxial Connectors  
**Product Type:** CRIMP ATTACHMENTS FOR FLEXIBLE & SEMI-RIGID CABLE  
**Description:** Bulkhead Feedthrough Cable Jack — Flexible Cable SMB CONNECTORS  
**Cable:** 174/188A/316/B7805A \*\*

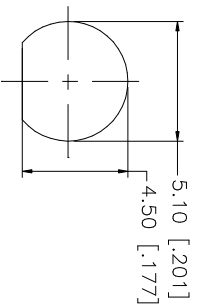
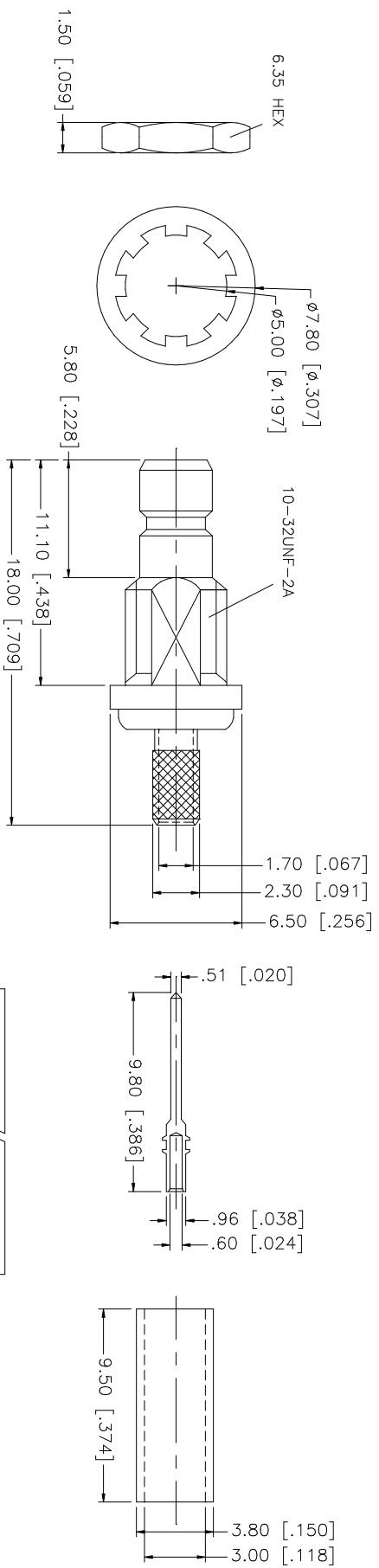
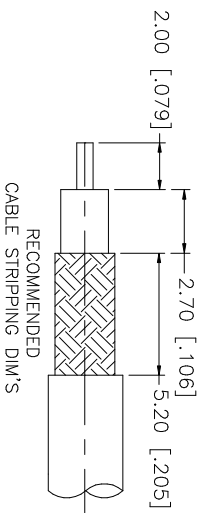
**Cable Group:** 05  
**Finish:** Gold  
**Insulation:** Teflon  
**Impedance:** 50 ohms  
**Crimp Tool:** [B](#)

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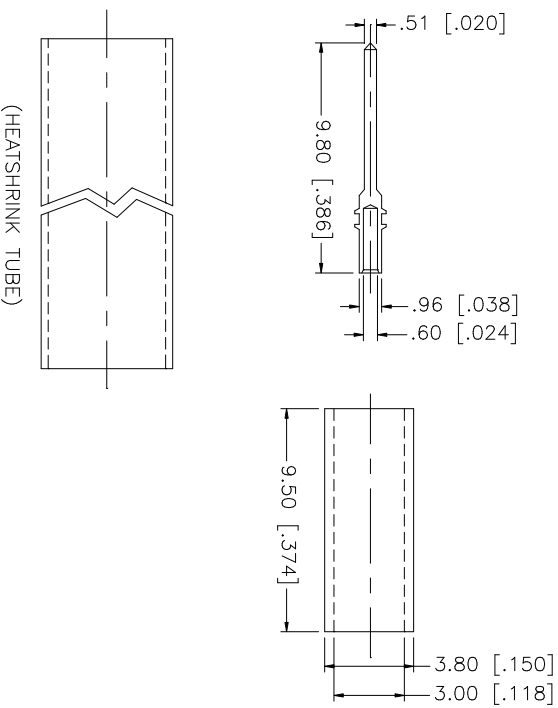
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REV.	DATE	DESCRIPTION
A	06/05/03	UPDATE DRAWING FORMAT



NOTE:

1. CRIMPED FERRULE  
HEX CRIMP SIZE .128"
2. CRIMPED CONTACT PIN  
SQ. CRIMP SIZE 0.7mm
3. MAX. PANEL THICKNESS = 2.4mm



QTY	FINISH	MATERIAL	DESCRIPTION
1	GOLD	BRASS	INSULATOR BODY
1	GOLD	BRASS	CONTACT PIN
1	GOLD	BRASS	LOCK WASHER
1	GOLD	BRASS	HEX NUT
1	GOLD	COPPER	FERRULE
1	BLACK		HEAT SHRINK TUBE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND FOR CUSTOMER REFERENCE ONLY.	UNLESS OTHERWISE SPECIFIED TOLERANCES FOR MILLING ARE:	UNLESS OTHERWISE SPECIFIED TOLERANCES FOR INCHES ARE:
	0.5 - 8mm ± 0.20mm	.020 - .315 = ± 0.007"
	8 - 30mm ± 0.40mm	.315 - 1.180 = ± 0.015"
	30 - 120mm ± 0.50mm	1.180 - 4.724 = ± 0.020"

APPROVALS	DATE	PART DESCRIPTION
DRAWN G.R.S.	06/05/03	SMB BULKHEAD CRIMP JACK (FOR RG-174/U, 188A/U, 316/U)
CHECKED		
ISSUED		
SHEET 1 OF 1		

CAD FILE	DWG. NO.	REV.	SIZE	SCALE
C:/142/142191.DWG	142191.DWG	A	A	NA

**Amphenol Connex**

142191

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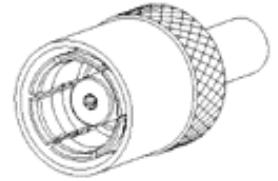
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## SMB connector series

[Features & Benefits](#) | [Applications](#) | [50 Ω Specs](#) | [75 Ω Specs](#) | [75 Ω High Density Specs](#) | [Assembly Instructions](#)

The SMB name derives from SubMiniature B (the second subminiature design). Developed in the 1960's, the SMB is a smaller version of the SMA with snap-on coupling. Amphenol's SMB connectors conform to the requirements of MIL-C-39012, and the interface is in compliance with MIL-STD-348. Available in 50 Ω and 75 Ω impedance, the SMB provides broadband capability through 4 GHz with a snap-on connector design and utilizes die cast components on non-critical areas to provide a low-cost solution.



### SMB/SMC Coaxial Connectors

#### CRIMP ATTACHMENTS FOR FLEXIBLE & SEMI-RIGID CABLE

[Straight Crimp Plug - Flexible Cable](#)  
[Straight Solder Plug - Semi-Rigid Cable](#)  
[Straight Crimp Jack - Flexible Cable](#)  
[Straight Crimp Jack - Flexible Cable](#)  
[Straight Solder Jack - Semi-Rigid Cable](#)  
[Right Angle Cable Plug - Flexible Cable](#)  
[Right Angle Cable Plug - Semi-Rigid Cable](#)  
[Bulkhead Feedthrough Cable Jack — Flexible Cable](#)  
[Bulkhead Feedthrough Cable Jack — Flexible Cable](#)  
[Right Angle Crimp Jack - Flexible & Semi-Rigid Cable](#)  
[Right Angle Bulkhead Crimp Jack — Flexible Cable](#)

#### CRIMP ATTACHMENTS FOR FLEXIBLE CABLE - 75 OHM SNAP LOCK

[Straight Crimp Plug - Snap Lock](#)  
[Right Angle Crimp Plug - Snap Lock](#)

#### CLAMP TERMINATIONS FOR FLEXIBLE CABLE

[Straight Cable Plug](#)  
[Straight Cable Jack](#)  
[Bulkhead Feedthrough Cable Jack](#)  
[Right Angle Cable Plug](#)

#### PRINTED CIRCUIT BOARD/STRAIGHT TERMINALS

[Straight Plug For P.C. Board](#)  
[Straight Jack For P.C. Board](#)  
[Straight Bulkhead Jack For P.C. Board](#)  
[Right Angle Plug For P.C. Board](#)  
[Right Angle Jack For P.C. Board](#)  
[Right Angle Bulkhead Jack For P.C. Board](#)

#### BULKHEAD MOUNT/SOLDER POT TERMINALS

[Bulkhead Jack Receptacle - Front Mount](#)  
[Bulkhead Jack Receptacle - Rear Mount](#)  
[Bulkhead Recessed Jack Receptacle](#)  
[Press Fit Jack Receptacle](#)

#### PANEL MOUNT/SOLDER POT TERMINALS

[Panel Mount Jack Receptacle - 4 Hole Square Flange](#)  
[Panel Mount Jack Receptacle — 2 Hole Flange](#)

#### ADAPTERS

[Plug-To-Plug Adapter](#)  
[Jack-To-Jack Adapter](#)

### Features & Benefits

- Broadband performance with low reflection DC to 4 GHz provides low cost connector combined with high quality.
- Quick connect/disconnect snap-on mating reduces installation time.
- Various plating options in nickel, gold, and tin lead. Selective plating provides corrosion resistance finish as well as good solderability characteristics.
- SMB PCB slide-on plug and jack allows board-to-board mounting with a low insertion force. This is ideal for mating a high number of connectors on a pair of PCB's.

### Applications

- |                    |                    |                        |
|--------------------|--------------------|------------------------|
| ■ Automotive       | ■ Automotive (GPS) | ■ Base Stations        |
| ■ Cable Assemblies | ■ Components       | ■ Instrumentation      |
| ■ PC/LAN           | ■ Process Controls | ■ Radio Boards         |
| ■ Surge Protection | ■ Telecom          | ■ Test and Measurement |
| ■ Video Systems    |                    |                        |

### 50 Ω SMB Specifications

<b>Electrical</b>	
Impedance	50 Ω
Frequency Range	0-4 GHz with low reflection; usable to 10.0 GHz
Voltage Rating for RG-188/U Cable	335 volts at sea level and 85 volts at 70,000 feet
Dielectric Withstanding Voltage	RG-196: 750 VRMS; RG-188: 1,000 VRMS
VSWR	Straight connector, RG-196/U: 1.30 + .04 f (GHz) Right angle connector, RG-196/U: 1.45 + .06 f (GHz) Straight connector, RG-188/U: 1.25 + .04 f (GHz) Right angle connector, RG-188/U: 1.35 + .04 f (GHz)
Contact Resistance	Center contact: 6.0 mΩ initial, 8.0 after environmental; Outer contact: 1.0 mΩ initial, 1.5 after environmental Braid to body: 1.0 mΩ initial, after environmental N/A
Insulation Resistance	1,000 MΩ minimum
Insertion Loss	Straight connector: 0.30 dB @ 1.5 GHz Right angle connector: 0.60 dB @ 1.5 GHz
RF Leakage	-55 dB minimum @ 2-3 GHz
<b>Mechanical</b>	
Mating	Snap-on coupling per MIL-STD-348
Braid/Jacket Cable Affixment	Hex crimp
Center Conductor Cable Affixment	Solder
Contact Captivation	All types unless noted otherwise
Cable Retention	Equal to breaking strength of cable employed
Engagement Forces	Engagement: 14 lbs maximum Disengagement: 2 lbs minimum After 500 matings, 14 lbs maximum engagement and disengagement
Connector Durability	500 mating cycles minimum
<b>Material</b>	
Center Contact	Female: beryllium copper, gold-plated Male: brass or beryllium copper, gold-plated
Outer Contact Plating	Nickel or gold plating as indicated
Body	Brass per QQB-626, or zinc per ASTM B86-71
Body Plating	Nickel or gold plating as indicated
Insulator	TFE
Crimp Ferrule	Annealed copper alloy

<b>Environmental</b>	
Temperature Range	- 65°C to +165°C
Thermal Shock	MIL-STD-202 method 107, test condition B (except high temperatures @ 200°C
Shock	MIL-STD-202 method 202, method 13, snap-on, test condition B; 75 G's @ 6 milliseconds ½ sine
Vibration	MIL-STD-202 method 204, snap-on, test condition B; (15 G's)
Corrosion	MIL-STD-202 method 101, test condition B. 5% salt solution

Note: These characteristics are typical but may not apply to all connectors.

### 75 Ω SMB Specifications

<b>Electrical</b>	
Impedance	75 Ω
Frequency Range	0-4 GHz with low reflection; usable to 10.0 GHz
Voltage Rating for RG-188/U Cable	335 volts at sea level and 85 volts at 70,000 feet
Dielectric Withstanding Voltage	1,000 VRMS
RF High Potential Withstanding Voltage	RF-195/U series: 500 VRMS
Corona Level	RG-195/U series: 400 volts minimum @ 70,000 ft
VSWR	Straight connector, RG-196/U: 1.30 + .04 f (GHz) Right angle connector, RG-196/U: 1.45 + .06 f (GHz) Straight connector, RG-188/U: 1.25 + .04 f (GHz) Right angle connector, RG-188/U: 1.35 + .04 f (GHz)
Contact Resistance	Center contact: 6.0 mΩ initial, 8.0 after environmental; Outer contact: 1.0 mΩ initial, 1.5 after environmental Braid to body: 1.0 mΩ initial, after environmental N/A
Insulation Resistance	1,000 MΩ minimum
Insertion Loss	Straight connector: 0.30 dB @ 1.5 GHz Right angle connector: 0.60 dB @ 1.5 GHz
RF Leakage	-55 dB minimum @ 2-3 GHz
<b>Mechanical</b>	
Mating	Snap-on coupling per MIL-STD-348
Braid/Jacket Cable Affixment	Hex crimp
Center Conductor Cable Affixment	Solder
Contact Captivation	All types unless noted otherwise
Cable Retention	Equal to breaking strength of cable employed
Engagement Forces	Engagement: 14 lbs maximum Disengagement: 2 lbs minimum After 500 matings, 14 lbs maximum engagement and disengagement
Connector Durability	500 mating cycles minimum
<b>Material</b>	
Center Contact	Female: beryllium copper, gold-plated Male: brass or beryllium copper, gold-plated
Outer Contact Plating	Nickel or gold plating as indicated
Body	Brass per QQB-626
Body Plating	Nickel or gold plating as indicated
Insulator	TFE
Crimp Ferrule	Annealed copper alloy
<b>Environmental</b>	
Temperature Range	- 65°C to +165°C
Thermal Shock	MIL-STD-202 method 107, test condition B (except high temperatures @ 200°C
Shock	MIL-STD-202 method 213, snap-on, test condition B; 75 G's @ 6 milliseconds ½ sine
Vibration	MIL-STD-202 method 202, snap-on, test condition B; (15 G's)
Corrosion	MIL-STD-202 method 101, test condition B. 5% salt solution