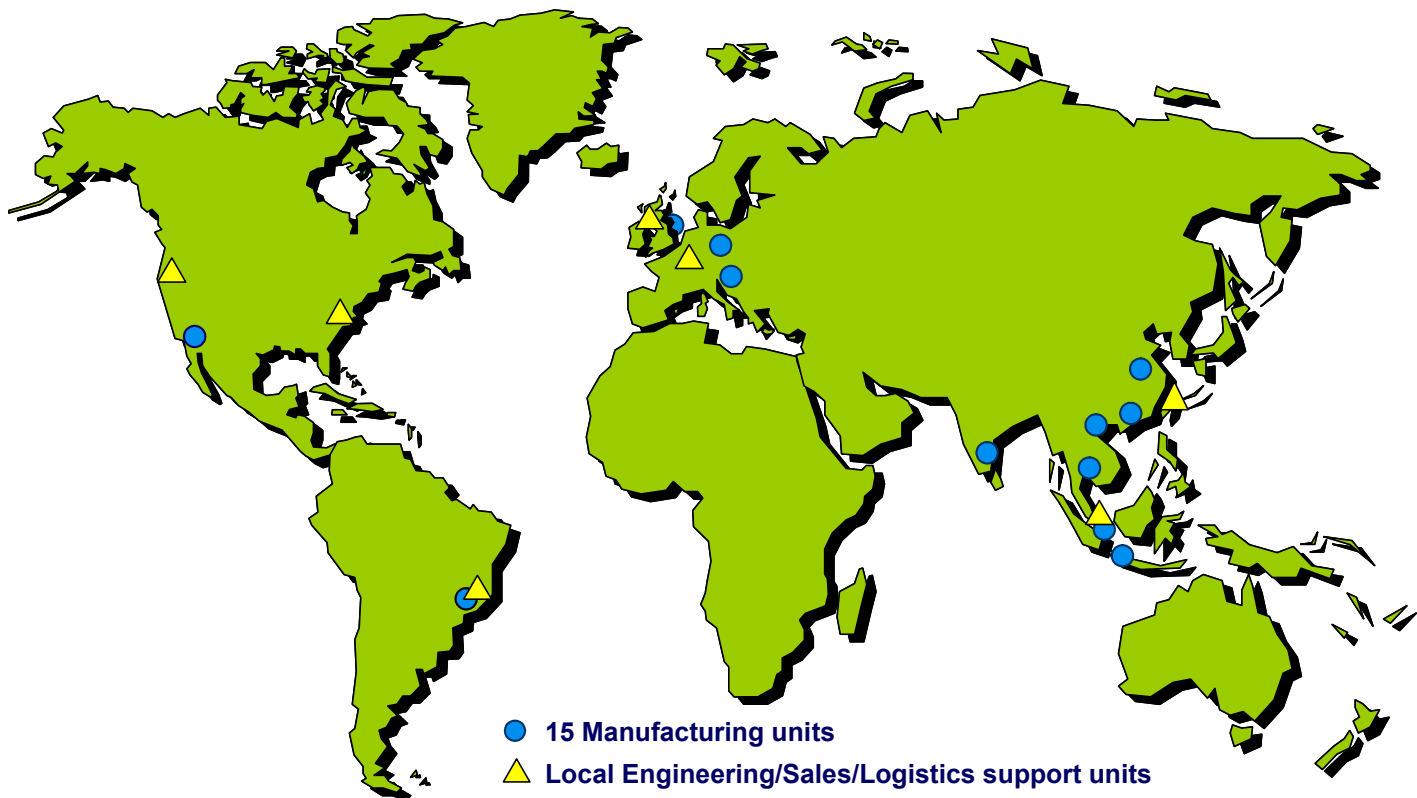


# Volex RF Connector Catalog





## Volex Group Global Footprint



## Introduction to Volex Connector



Volex Connector designs, manufactures and sells RF connectors and adapters for signal (voice/data) transmission. Whether the need be for a standard off-the-shelf product or a custom design for an application specific solution, Volex Connector can meet your needs.

With headquarters in Hickory, North Carolina, Volex Connector has representatives covering all areas of North America and Europe. A provider for both the commercial and military markets, Volex Connector solves the RF connection needs for applications associated with:

- Wireless communications
- Internet solutions
- Broadband communications
- Mil/Aero equipment
- Instrumentation

Volex Connector is focused on quick delivery of standard products and quick turnaround of designs/samples for application specific needs. Our manufacturing locations are located in multiple facilities in mainland China. All facilities utilize state of the art high precision turning and milling equipment.

All manufacturing facilities and their external vendors such as plating and casting suppliers have all been certified to ISO 9001:2000.

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33	7/16 Connector
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RF Connector Product Line Overview



 <p><u>BNC</u></p>	 <p><u>TNC</u></p>	 <p><u>SMA</u></p>
 <p><u>SMB</u></p>	 <p><u>SMC</u></p>	 <p><u>SMZ</u></p>
 <p><u>MCX</u></p>	 <p><u>MMCX</u></p>	 <p><u>N</u></p>
 <p><u>1.0/2.3</u></p>	 <p><u>1.6/5.6</u></p>	 <p><u>7/16</u></p>
 <p><u>E</u></p>	 <p><u>MINI-UHF</u></p>	



**Blank**

## BNC Connector



The BNC connector is a commercial quality product that intermates with all standard double bayonet stud BNC designs. All contacts are captivated for ruggedness. The 50 ohm and 75 ohm interfaces are intermateable and provide quick, reliable connections for instrumentation, medical and LAN applications.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 (75 Ohm) nominal (except where noted)  
Frequency range: 0-4 GHz (0-1 GHz)  
Working voltage: 500 volts RMS at sea level  
Dielectric withstanding voltage: 1500 volts RMS at sea level  
Contact resistance: Outer-0.4 milliohms maximum  
Center-1.5 milliohms maximum  
Insulation resistance: 5000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -55° to +85°

#### **Mechanical Characteristics**

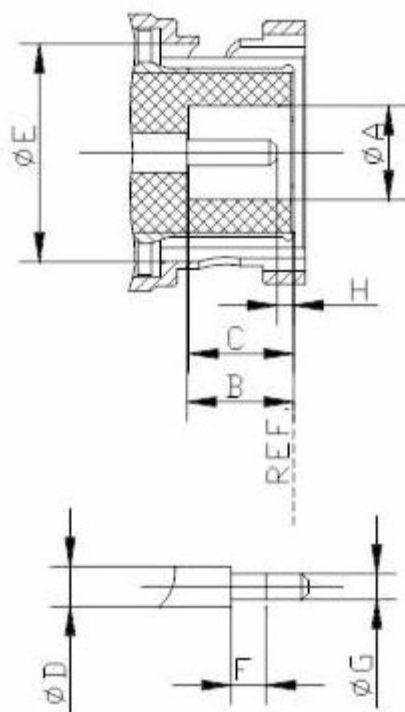
Durability: 500 cycles

#### **Materials**

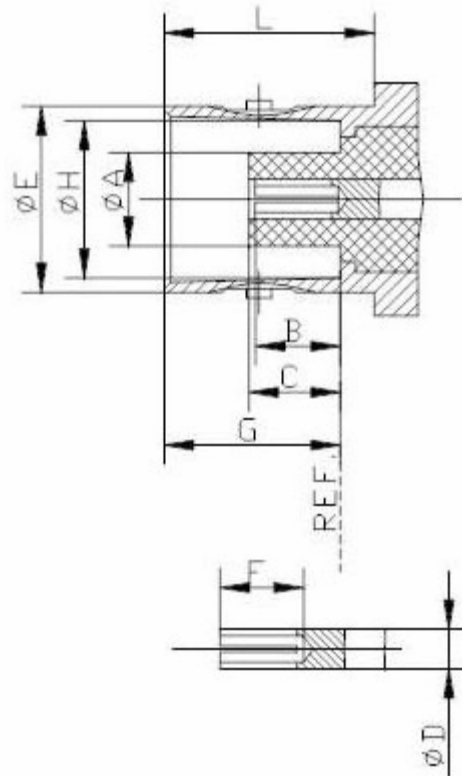
Body and coupling nut: Zinc or brass  
Contact: Beryllium copper, phosphor bronze or brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Nickel  
Crimp sleeve - Nickel  
Hardware - nickel  
Contact - Gold

\* These values are typical and may not apply to all connectors

## PLUG



## JACK





## BNC Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	4.83	-	-	4.72
B	5.33	5.84	4.72	5.23
C	5.28	5.79	4.78	5.28
D	2.06	2.21	2.06	2.21
E	9.78	9.91	9.60	9.70
F	1.98	-	4.95	-
G	1.32	1.37	8.31	8.51
H	0.08	-	8.10	8.15
I		-	10.52	-

### Product listing:



Straight Crimp Type Plug



Straight Crimp Plug



Straight Bulkhead Plug



Flange Mount Type Plug



Dust Cap With Chain



Straight Crimp Type Jack



## BNC Connector



Front Mount Bulkhead Jack Receptacle



Front Mount Bulkhead Jack Receptacle



Front Mount Bulkhead Jack Receptacle



Straight Jack Receptacle



Right Angle Jack Receptacle



Flange Mount Type Jack



Jack To Plug Adapter



Jack To Jack Adapter

## BNC Connector



Bulkhead Jack To Jack Adapter



Bulkhead Jack To Jack Adapter



Plug To Plug Adapter



Jack To Jack To Jack T Adapter



Jack To Jack To Plug T Adapter



Jack To Plug To Jack T Adapter



Jack To Plug Right Angle Adapter



Plug To Jack To Jack Goal Post T Adapter

## TNC Connector



The TNC connector is a threaded version of the BNC mating interface. All contacts are captivated for ruggedness. The TNC is a commercial quality connector that provides addition for shock and vibration applications. The TNC connector intermates with all standard 50 Ohm TNC connectors.

### Specifications

#### Electrical Characteristics

Impedance: 50 Ohm nominal (except where noted)  
Frequency range: 0-11 GHz  
Working voltage: 500 volts RMS at sea level  
Dielectric withstanding voltage: 1500 volts RMS at sea level  
Contact resistance: Outer-0.4 milliohms maximum  
Center-1.5 milliohms maximum  
Insulation resistance: 5000 megohms minimum

#### Environmental Characteristics

Recommended temperature range: -55°C to +85°C

#### Mechanical Characteristics

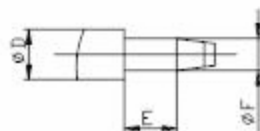
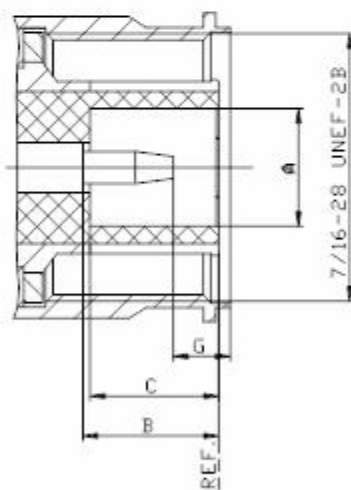
Durability: 500 cycles

#### Materials

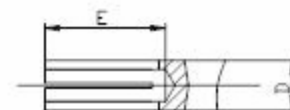
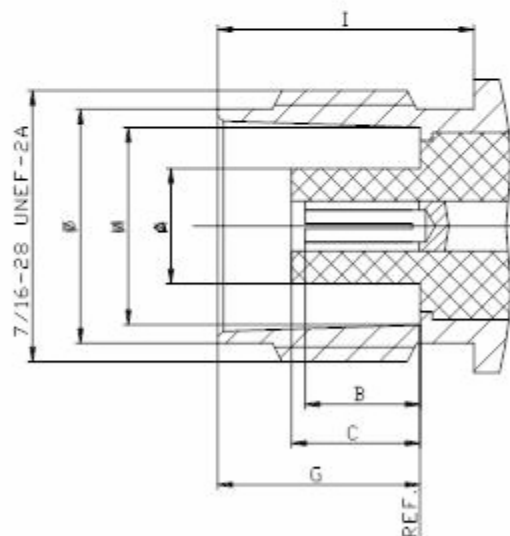
Body and coupling nut: Zinc or brass  
Contact: Beryllium copper, phosphor bronze or brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Nickel  
Crimp sleeve - Nickel  
Hardware - nickel  
Contact - Gold

\* These values are typical and may not apply to all connectors

## PLUG



## JACK



## TNC Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	4.83	-	-	4.72
B	5.33	5.84	4.72	5.23
C	5.28	5.79	4.78	5.28
D	2.06	2.21	2.06	2.21
E	1.98	-	4.95	-
F	1.32	1.37	9.60	9.70
G	0.08	-	8.31	8.51
H	-	-	8.10	8.15
I	-	-	10.52	-

### Product listing:



Straight Crimp Type Plug



Jack To Jack Adapter



Jack To Bulkhead Jack Adapter



Flange Mount Type Jack



Straight Crimp Type Jack



Straight Crimp Type Jack

## SMA Connector



The SMA threaded interface connectors are designed for higher frequency applications where maximum reliability and robustness is required. This connector range is suitable for the standard ranges of flexible and semi rigid cables and is also available as a PCB mounted version.

### Specifications

#### Electrical Characteristics

Impedance: 50 Ohm nominal (except where noted)  
 Frequency range: 0-18 GHz  
 Working voltage: 250 volts RMS at sea level  
 Dielectric withstanding voltage: 750 volts RMS at sea level  
 Contact resistance: Outer-2.5 milliohms maximum  
 Center-3.0 milliohms maximum  
 Insulation resistance: 5000 megohms minimum

#### Environmental Characteristics

Recommended temperature range: -55°C to +85°C

#### Mechanical Characteristics

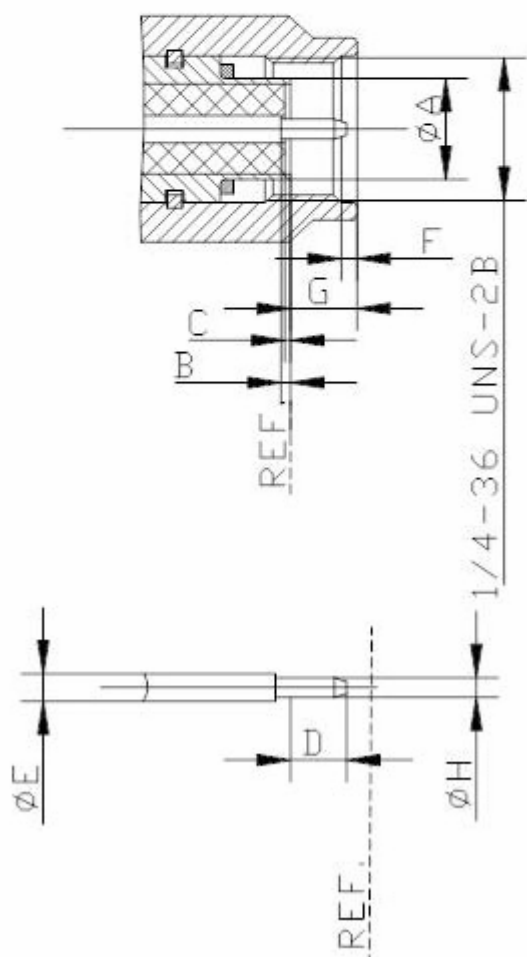
Durability: 500 cycles

#### Materials

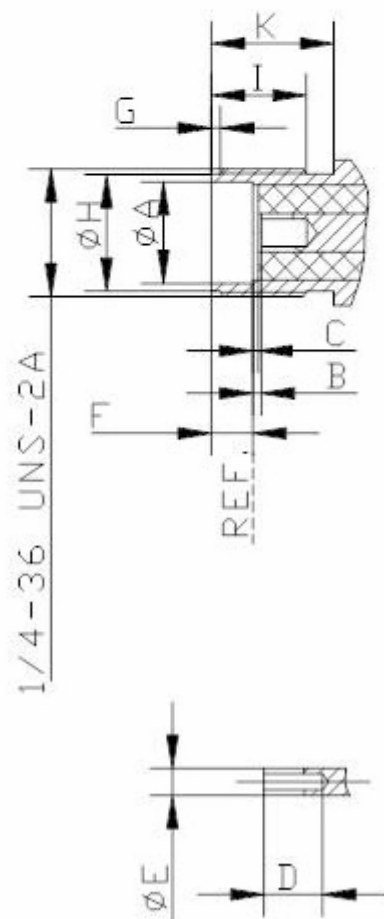
Body and coupling nut: Zinc or brass  
 Contact: Beryllium copper, phosphor bronze or brass  
 Crimp sleeve: Brass  
 Insulator: Teflon  
 Hardware: Brass  
 Plating: Body - Nickel or gold  
 Crimp sleeve - Nickel  
 Hardware - nickel or gold  
 Contact - Gold

\* These values are typical and may not apply to all connectors

## PLUG



## JACK



## SMA Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	-	4.59	4.59	-
B	0.00	0.25	0.00	0.25
C	0.00	0.25	0.00	0.25
D	-	2.54	2.67	-
E	1.24	1.29	1.24	1.29
F	0.38	1.14	1.88	1.98
G	-	3.43	0.38	1.14
H	0.90	0.94	5.28	5.49
I	-	-	4.32	-
K	-	-	5.54	-

### Product listing:



**Straight Crimp Type Plug**



**Straight Plug (Semi-Rigid)**



**Right Angle Crimp Type Plug**



**Right Angle Plug (Semi-Rigid)**



**Right Angle Crimp Type Jack**



**Straight Crimp Type Jack**



## SMA Connector



Flange Mount Jack Receptacle



Plug To Plug Adapter



Jack To Jack Adapter



Straight Plug



Straight Plug



Straight Plug



Straight Plug



Right Angle Plug



Right Angle PCB Jack



Right Angle Plug



## SMA Connector



Right Angle Plug



Straight PCB Jack

## SMB Connector



The SMB connectors incorporate a 'snap on' latching action for ease of connection. This connector range is suitable for the standard ranges of flexible and semi-rigid cables and is also available in PCB and panel mount versions. The characteristic impedance of the SMB coaxial connectors is 50 or 75 ohm. The 75 ohm version is also known as SMZ coaxial connector. SMB connectors (50 ohm) meet the specification of IEC 169-10, CECC 22130 and MIL-C-39012.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 Ohm nominal (except where noted)  
Frequency range: 0-4GHz  
Working voltage: 250 volts RMS at sea level  
Dielectric withstanding voltage: 750 volts RMS at sea level  
Contact resistance: Center - 5 milliohms maximum  
Outer - 2.5 milliohms maximum  
Insulation resistance: 10000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -65°C to +165°C

#### **Mechanical Characteristics**

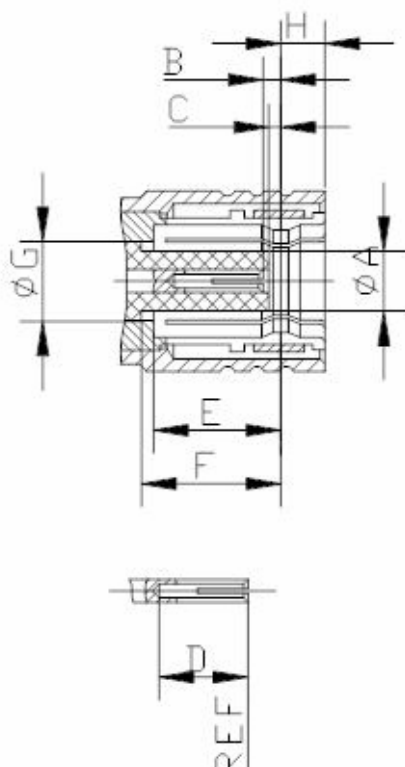
Durability: 500 cycles

#### **Materials**

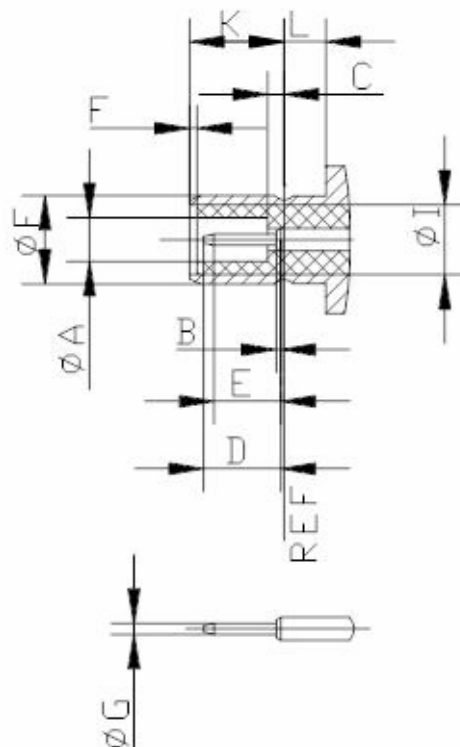
Body : brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Gold  
Crimp sleeve - Gold  
Hardware - Gold  
Contact - Gold

These values are typical and may not apply to all connectors

## PLUG



## JACK



## SMB Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	-	2.06	2.08	-
B	0.18	0.94	-	0.18
C	0.18	-	-	0.18
D	2.97	-	-	2.97
E	3.58	-	1.32	-
F	3.58	-	3.66	3.71
G	3.05	3.05	0.48	0.53
H	-	1.63	0.00	-
I	-	-	3.05	3.05
K	-	-	3.33	3.58
L	-	-	1.65	-

### Product listing:



**Straight Crimp Type Plug**



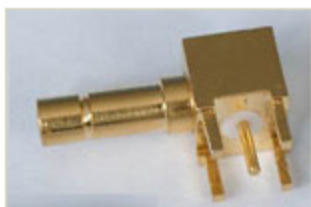
**Right Angle Crimp Type Jack**



**Right Angle Crimp Type Plug**



**Straight Crimp Type Jack**



**Right Angle PCB Jack**

## SMC Connector



The SMC connectors have been designed with a 'threaded' coupling and have the same size as the SMB connectors. They are particularly suitable for use in high vibration environments. This connector range is suitable for the standard ranges of flexible and semi rigid cables and is also available in PCB and panel mount versions. The characteristic impedance of the SMC coaxial connectors is 50 ohm. SMC coaxial connectors meet the specification of IEC 169-9, CECC 22140 and MIL-C-39012.

### Specifications

#### Electrical Characteristics

Impedance: 50 Ohm nominal (except where noted)  
 Frequency range: 0-10GHz  
 Working voltage: 250 volts RMS at sea level  
 Dielectric withstanding voltage: 750 volts RMS at sea level  
 Contact resistance: Center -5 milliohms maximum  
 Outer -2.5 milliohms maximum  
 Insulation resistance: 10000 megohms minimum

#### Environmental Characteristics

Recommended temperature range: -65°C to +165°C

#### Mechanical Characteristics

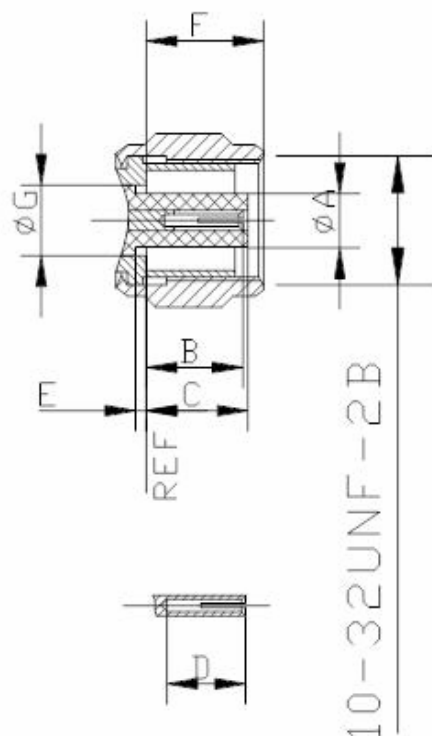
Durability: 500 cycles

#### Materials

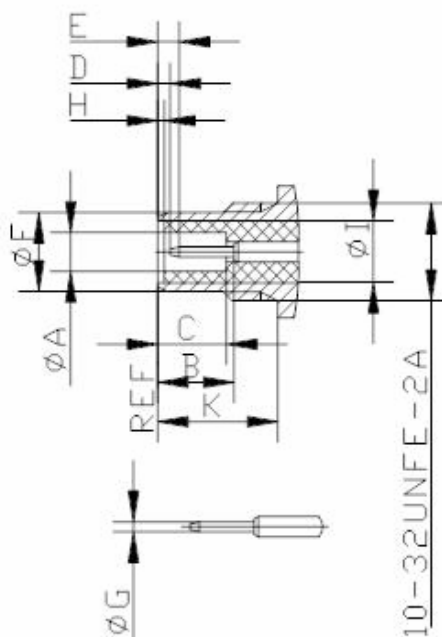
Body: brass  
 Contact: Beryllium copper and brass  
 Crimp Sleeve: Brass  
 Insulator: Teflon  
 Hardware: Brass  
 Plating: Body -Gold  
 Crimp sleeve -Gold  
 Hardware -Gold  
 Contact - Gold

These values are typical and may not apply to all connectors

## PLUG



## JACK



## SMC Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	-	2.60	2.08	-
B	2.85	3.40	3.40	-
C	-	3.40	3.40	-
D	2.79	-	0.61	-
E	0.00	-	-	2.13
F	-	5.92	-	3.71
G	3.05	3.05	0.48	0.53
H	-	-	0.00	-
I	-	-	3.05	3.05
K	-	-	5.94	-

### Product listing:



Straight Crimp Type Plug



Straight Crimp Type Jack



Right Angle Crimp Type Jack



Right Angle Crimp Type Plug

## SMZ Connector



The complete range of standard SMZ Type 43, 75 ohm series connectors shown is, where applicable, fully approved to British Standard-BS9210 F0022. The SMZ interconnect system provides front or rear jumpered cable management solutions for Digital Distribution Frames (DDF) which meet the requirements of traditional telecommunication network operators. Precision manufactured components with simple latching mechanism and selective gold plating ensure both high quality and high performance from an industry proven coaxial connector system. SMZ coaxial connectors meet the specification of IEC 169-28.

### Specifications

#### **Electrical Characteristics**

Impedance: 75 Ohm nominal (except where noted)  
Frequency range: 0-3GHz  
Working voltage: 500 volts RMS at sea level  
Dielectric withstanding voltage: 1500 volts RMS at sea level  
Insulation resistance: 5000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -40°C to +100°C

#### **Mechanical Characteristics**

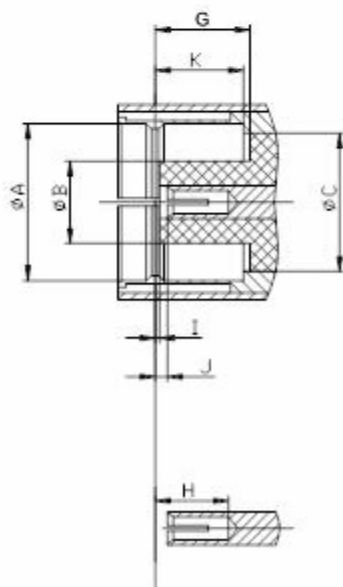
Durability: 500 cycles

#### **Materials**

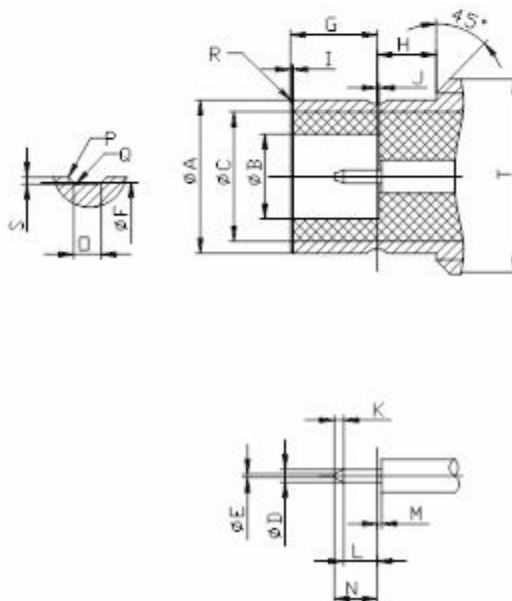
Body : brass  
Contact: bronze and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Nickel and Gold  
Crimp sleeve - Nickel  
Hardware - Nickel  
Contact - Gold

These values are typical and may not apply to all connectors

# JACK



# PLUG



## SMZ Connector



	PLUG		JACK	
	Min	Max	Min	Max
ØA	6.20	6.25	6.35	-
ØB	3.35	-	-	3.33
ØC	5.60NOM	5.60NOM	5.60NOM	5.60NOM
ØD	0.48	0.53		
ØE	-	0.25		
ØF	5.97	6.07		
G	3.33	3.58	3.58	-
H	2.01	-	2.97	-
I	0.00	-	0.18	-
J	-	0.18	0.18	0.94
K	0.25	-	3.58	-
L	1.32	-		
M	-	0.18		
N	-	2.97		
O	0.58NOM	0.58NOM		
P	0.05	0.15		
Q	-	0.13		
R	0.10	-		
S	0.15	0.25		
T	-	7.94		



## SMZ Connector

Product listing:



Straight Crimp Type Plug



Straight Crimp Type Jack



Plug To Jack To Jack Adapter



**Blank**

## MCX Connector



MCX 50 ohm miniature Snap On connectors from SCD Connection offer you an excellent blend of size, weight, durability and performance for applications such as mobile and fixed telecommunications, in GPS applications and Test Measurement systems for testing instruments and apparatus.

MCX Connectors meet the specification of IEC 1169-36 and CECC 22220.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 (75 Ohm) nominal (except where noted)  
Frequency range: 0-6 GHz (0-6GHz)  
Working voltage: 170 (170) volts RMS at sea level  
Dielectric withstanding voltage:  
750 (500) volts RMS at sea level  
Contact resistance: Center - 5 (5) milliohms maximum  
Outer - 1 (2.5) milliohms maximum  
Insulation resistance: 10000 (1000) megohms minimum

#### **Environmental Characteristics**

Recommended temperature range:  
-55° to +155° (-65° to +165°)

#### **Mechanical Characteristics**

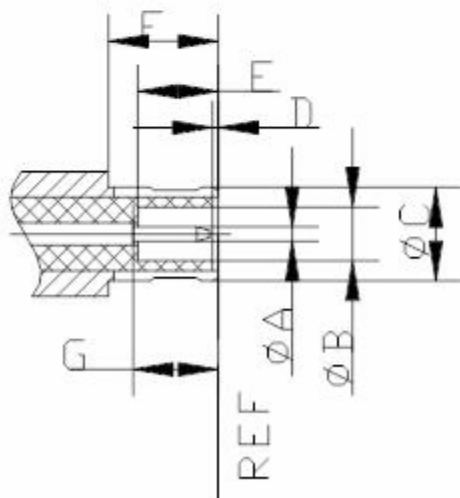
Durability: 500 cycles

#### **Materials**

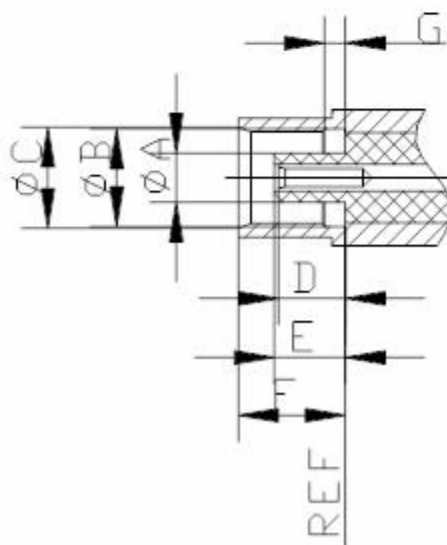
Body: brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Gold  
Crimp sleeve - Gold  
Hardware - Gold  
Contact - Gold

These values are typical and may not apply to all connectors

# PLUG



# JACK



## MCX Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	0.48	0.53	1.80	1.97
B	2.00	2.07	3.43	3.48
C	3.66	3.76	3.61	3.75
D	0.00	0.30	2.31	2.79
E	2.81	3.20	2.61	2.79
F	4.16	-	4.00	4.12
G	2.81	3.20	0.75	0.85

### Product listing:



**Straight Crimp Type Plug**



**Straight Crimp Type Jack**



**Right Angle Crimp Type Plug**



**Right Angle Crimp Type Jack**



**Right Angle PCB Jack**



**Straight Jack**

## MMCX Connector



Tomorrow's base stations and wireless architectures require the highest level of RF performance. MMCX connector series is rated at 6 GHz and is about 50 percent of the size of the MCX and SMB series. The MMCX connector is designed with a 50 ohm impedance and a reliable snap-on coupling method producing low "RF leakage". It is designed for use in applications where space requirements are small and weight limitations are demanded.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 Ohm nominal (except where noted)  
Frequency range: 0-6 GHz  
Working voltage: 165 volts RMS at sea level  
Dielectric withstanding voltage: 500 volts RMS at sea level  
Contact resistance: Center - 5 milliohms maximum  
Outer - 1 milliohms maximum  
Insulation resistance: 1000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -55°C to +155°C

#### **Mechanical Characteristics**

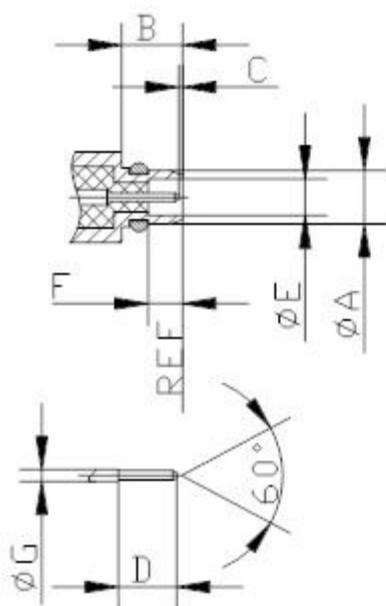
Durability: 500 cycles

#### **Materials**

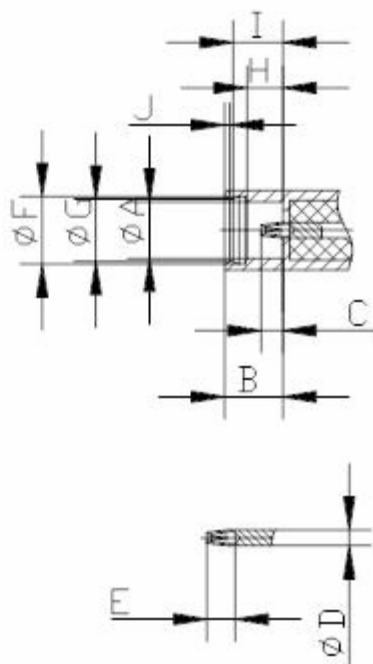
Body: brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Gold  
Crimp sleeve - Gold  
Hardware - Gold  
Contact - Gold

These values are typical and may not apply to all connectors

## PLUG



## JACK



## MMCX Connector



	PLUG		JACK	
	Min	Max	Min	Max
ØA	-	2.40	2.41	-
ØB	2.70	-	2.60	-
ØC	0.00	0.25	0.90	1.20
ØD	-	3.15	0.68	0.72
ØE	1.58	1.62	1.40	-
ØF	1.45	-	3.00	3.04
G	0.38	0.42	2.87	2.90
H	-	0.20	1.57	1.63
I			2.30	2.34
K			-	0.23

### Product listing:



Straight Crimp Type Plug



Right Angle Crimp Type Plug



Straight Crimp Type Jack



Right Angle Crimp Type Jack

## 1.0/2.3 Connector



The 1.0/2.3 connectors are offered in both 50 and 75 ohm series. These connectors are now widely used in telecommunication systems where, due to their smaller size, significant space saving can be achieved. The 1.0/2.3 inserts feature a slide-on coupling mechanism, which ensures a short connect/disconnect time. Ideally suited to RF and high speed digital equipment, the connectors are designed to meet the requirements of CECC 22230 and DIN 41626/2.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 Ohm nominal (except where noted)  
Frequency range: 0-4GHz  
Working voltage: 250 volts RMS at sea level  
Dielectric withstanding voltage: 750 volts RMS at sea level  
Contact resistance: Center - 10 milliohms maximum  
Outer - 3 milliohms maximum  
Insulation resistance: 200 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -55°C to +125°C

#### **Mechanical Characteristics**

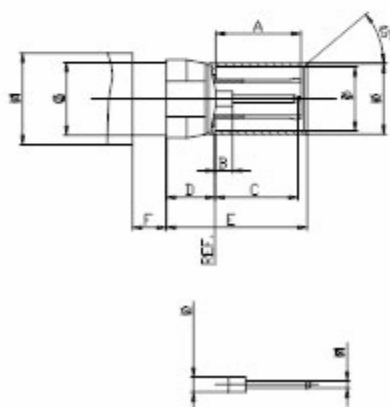
Durability: 500 cycles

#### **Materials**

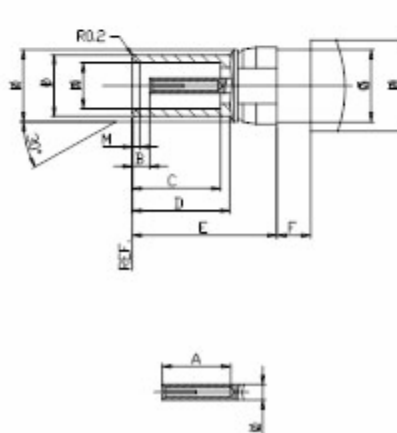
Body: brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Nickel  
Crimp sleeve - Nickel  
Hardware - Gold  
Contact - Gold

These values are typical and may not apply to all connectors

### PLUG



### JACK





## 1.0/2.3 Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	5.40	5.70	4.50	-
B	-	1.15	1.15	1.45
C	5.20	5.50	5.80	5.90
D	3.05	3.20	6.40	6.50
E	9.25	9.35	9.50	9.60
F	2.22	2.40	2.22	2.40
G	4.76	4.79	4.76	4.79
H	-	6.00	-	6.00
I	4.20	4.28	4.03	4.15
K	4.66	4.78	4.72	4.75
L	1.00	1.00	1.00	1.00
M	0.48	0.52	0.50	0.60
N	-	-	3.00	3.06

### Product listing:



Straight Crimp Type Plug



Straight Crimp Type Plug

## 1.6/5.6 Connector



The range of 1.6/5.6 connectors is suitable for use in 75 ohm communication systems. These connectors have become the recognized standard in telecommunication systems in many parts of the world. They are designed to meet the requirements of DIN 47295, CECC 22240 and IEC 169-13.

### Specifications

#### **Electrical Characteristics**

Impedance: 75 Ohm nominal (except where noted)  
Frequency range: 0-8GHz  
Working voltage: 330 volts RMS at sea level  
Dielectric withstanding voltage: 1000 volts RMS at sea level  
Contact resistance: Center -4 milliohms maximum  
Outer -2 milliohms maximum  
Insulation resistance: 10000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -55°C to +125°C

#### **Mechanical Characteristics**

Durability: 500 cycles

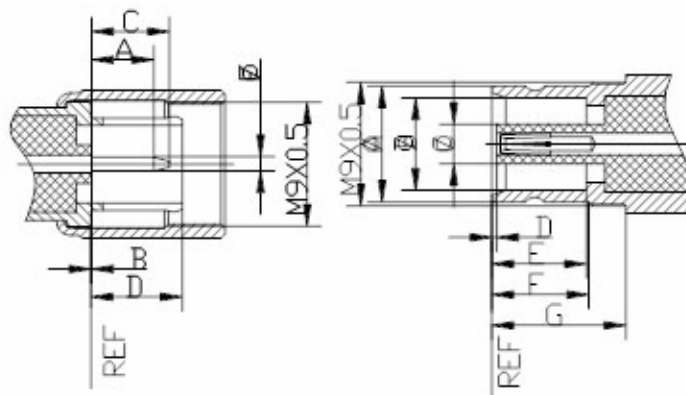
#### **Materials**

Body : brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body -Nickel and Gold  
Crimp sleeve -Nickel  
Hardware -Nickel  
Contact - Gold

These values are typical and may not apply to all connectors

PLUG

JACK



## 1.6/5.6 Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	3.90	3.90	8.01	8.25
B	-	0.15	6.60	6.69
C	-	5.50	-	2.80
D	-	6.60	0.25	-
E	1.00	1.06	6.70	-
F			7.00	7.50
G			9.70	-

### Product listing:



Straight Clamp Type Jack



Straight Clamp Type Plug

## 7/16 Connector



7/16 rugged coaxial connectors with screw lock have been designed for low intermodulation and VSWR applications in medium to high power transmission systems. For the purposes low intermodulation product and waterproof types are also available. Therefore they are suitable for outdoor and tower mounted applications. This connector range is suitable for the standard ranges of flexible and semi-rigid cables and is also available in panel mount versions. The characteristic impedance of the 7/16 coaxial connectors is 50 ohm. 7/16 connectors meet the specification of IEC 169-4.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 nominal (except where noted)  
Frequency range: 0-4 GHz (0-1 GHz)  
Working voltage: 500 volts RMS at sea level  
Dielectric withstanding voltage: 1500 volts RMS at sea level  
Contact resistance: Outer-0.4 milliohms maximum  
Center-1.5 milliohms maximum  
Insulation resistance: 5000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -55°C to +85°C

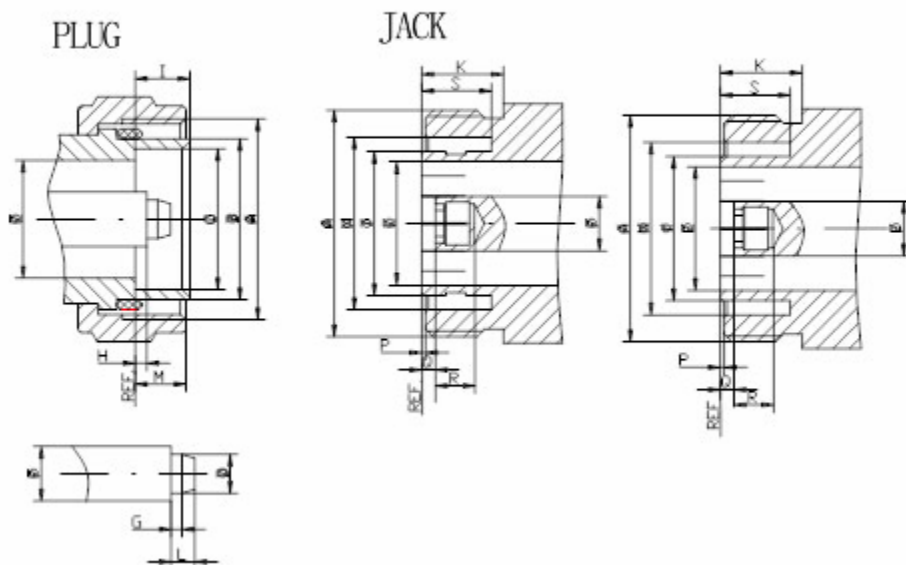
#### **Mechanical Characteristics**

Durability: 500 cycles

#### **Materials**

Body and coupling nut: Zinc or brass  
Contact: Beryllium copper, phosphor bronze or brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body- White Bronze  
Crimp sleeve - Nickel  
Hardware - nickel  
Contact - Gold

These values are typical and may not apply to all connectors



## 7/16 Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	M29*1.5		M29*1.5	
B	20.60	21.40	-	-
C	18.03	18.21	-	-
D	4.96	5.04	-	-
E	15.85	16.25	15.85	16.25
F	7.00	7.00	7.00	7.00
G	1.40	1.60	-	-
H	1.47	1.77	-	-
I	7.00	8.00	-	-
K	-	-	10.00	-
L	-	4.50	-	-
M	7.00	9.00	-	-
N	-	-	22.10	22.90
P	-	-	0.50	0.70
Q	-	-	1.77	2.07
R	-	-	5.00	-
S	-	-	8.10	-
U	-	-	-	18.5
	-	-	-	18.00

## 7/16 Connector



### Product listing:



PCB Straight Jack



PCB Straight Plug



Straight Jack



Straight Jack



Straight Plug



Straight Plug



Right Angle Plug



**Blank**



## N Connector



The N connector employs a large diameter threaded interface for excellent strength and reliability. This commercial quality connector handles high power applications such as antenna feeds for radios and cell sites. Termination options include crimp and clamp styles for rugged service.

### Specifications

**Electrical Characteristics** Impedance: 50 Ohm(75 Ohm) nominal (except where noted)

Frequency range: 0-11 GHz(1.5GHz)

Working voltage: 1000 volts RMS at sea level

Dielectric withstanding voltage: 2500 volts RMS at sea level

Contact resistance: Outer-0.25 milliohms maximum

Center-1.0 milliohms maximum

Insulation resistance: 5000 megohms minimum

### Environmental Characteristics

Recommended temperature range: -55°C to +85°C

### Mechanical Characteristics

Durability: 500 cycles

### Materials

Body and coupling nut: Zinc or brass

Contact: Beryllium copper, phosphor bronze or brass

Crimp Sleeve: Brass

Insulator: Teflon

Hardware: Brass

Plating: Body - Nickel

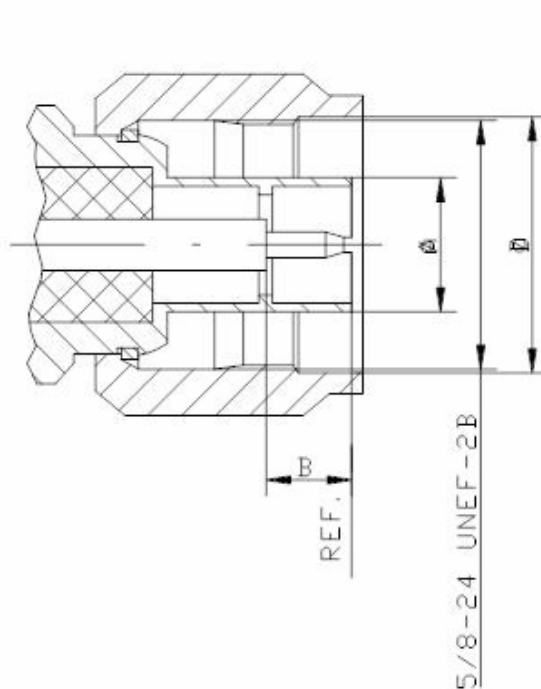
Crimp sleeve - Nickel

Hardware - nickel

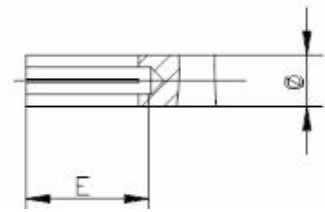
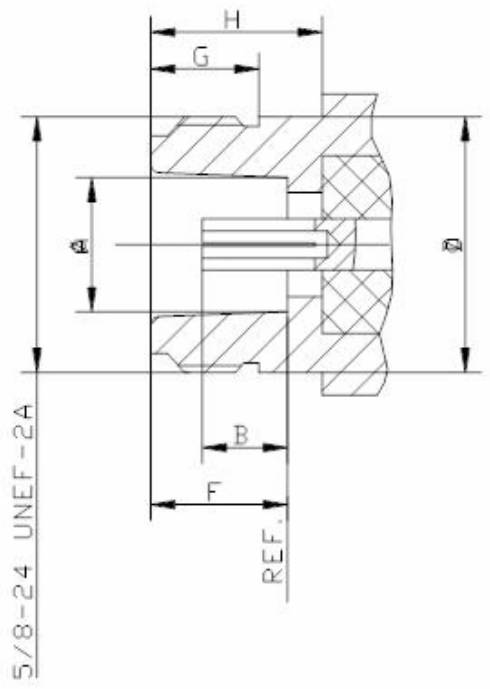
Contact - Gold

\* These values are typical and may not apply to all connectors

## PLUG



## JACK



## N Connector



	PLUG		JACK	
	Min	Max	Min	Max
ØA	-	8.38	8.03	8.13
ØB	5.33	5.84	4.75	5.26
ØC	-	3.15	-	3.15
ØD	16.00	-	-	15.93
ØE	1.60	1.68	5.33	-
ØF	-	-	9.04	9.19
G	-	-	6.76	-
H	-	-	10.72	-

### Product listing:



Straight Crimp Type Plug



Flange Mount Jack Receptacle



Flange Mount Jack Receptacle



Straight Crimp Type Jack



Jack To Jack Adapter



Plug To Plug Adapter

## N Connector



Jack To Jack To Jack Adapter



Straight Clamp Plug



Straight Clamp Jack



Straight Clamp Jack



Straight Clamp Plug



Straight Clamp Jack



Straight Clamp Plug



Straight Clamp Jack



Straight Clamp Plug



Right Angle Clamp Plug

## N Connector



Right Angle Plug



Flange Mount Jack Receptacle



Straight Jack

## F Connector



The F series coaxial connectors designed for the OEM market for use in amplifier housings, broadband modems, headend equipment, and tuner modules. The line is available for mounting on PCB in various configurations such as right angle, edge mount, and bulkhead mount.

### Specifications

#### **Electrical Characteristics**

Impedance: 75 Ohm nominal (except where noted)  
Frequency range: 0-1GHz  
Working voltage: 1500 volts RMS at sea level  
Dielectric withstanding voltage: 1000 volts RMS at sea level  
Contact resistance: Center - 5 milliohms maximum  
Outer - 2.5 milliohms maximum  
Insulation resistance: 10000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -40°C to +60°C

#### **Mechanical Characteristics**

Durability: 500 cycles

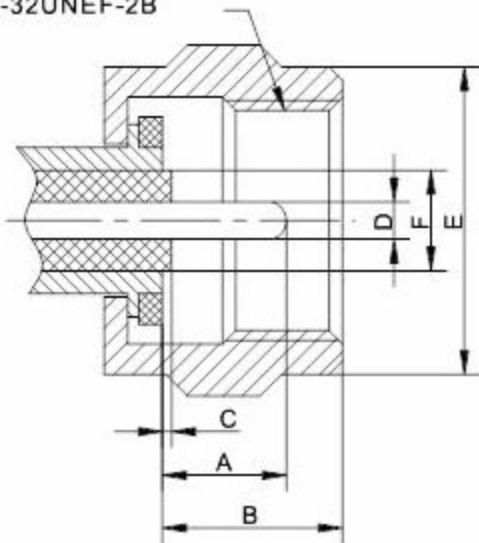
#### **Materials**

Body : brass  
Contact: phosphor bronze and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body - Nickel and Gold  
Crimp sleeve - Nickel  
Hardware - Nickel  
Contact - Gold and Silver

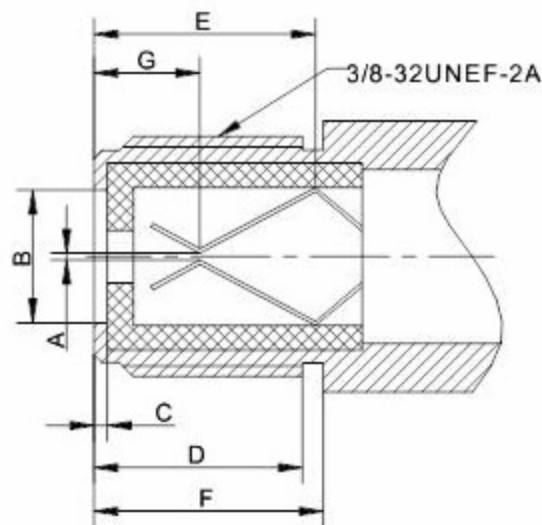
These values are typical and may not apply to all connectors

# PLUG

3/8-32UNEF-2B



# JACK

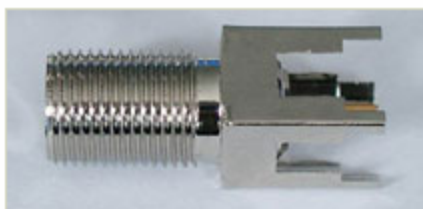


## F Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	4.95	6.86	0.51	1.63
B	-	7.29	3.86	-
C	-	0.25	0.30	-
D	0.51	1.63	5.56	-
E	-	12.95	7.00	-
F		3.80	7.59	-
G		3.58	-	4.70

### Product listing:



Straight Jack



Plug To Jack Adapter



Jack To Jack Adapter



Straight Plug

## Mini UHF Connector



Mini UHF connectors clench the teeth after adopting the end tooth, the whorl is joined, It suitable radio communication, cellular telephone and office land network make electric signal transmit and join radio frequency cable spend among a small circle. It is reliable that its characteristic is stabilized, joins by performance, can exchange and use with the similar products in many countries.

### Specifications

#### **Electrical Characteristics**

Impedance: 50 Ohm nominal(except where noted)  
Frequency range: 0-2.5GHz  
Working voltage: 335 volts RMS at sea level  
Dielectric withstanding voltage: 1000 volts RMS at sea level  
Contact resistance: Center -5 milliohms maximum  
Outer -2.5 milliohms maximum  
Insulation resistance: 5000 megohms minimum

#### **Environmental Characteristics**

Recommended temperature range: -40°C to +85°C

#### **Mechanical Characteristics**

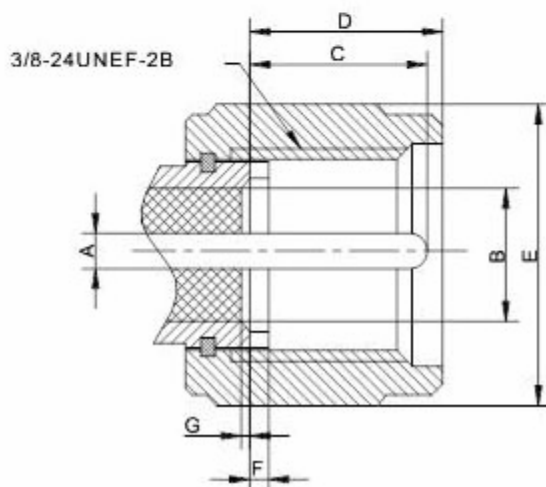
Durability: 500 cycles

#### **Materials**

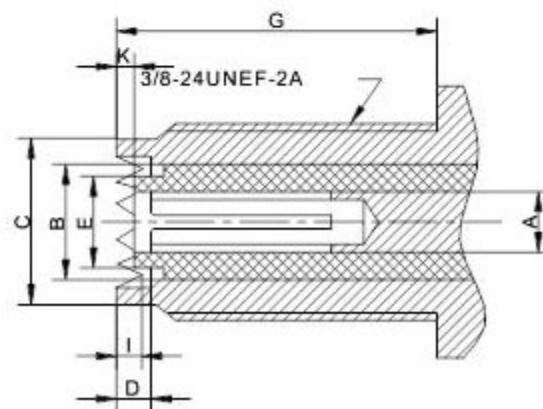
Body : brass  
Contact: Beryllium copper and brass  
Crimp Sleeve: Brass  
Insulator: Teflon  
Hardware: Brass  
Plating: Body -Nickel and Silver  
Crimp sleeve -Nickel  
Hardware -Nickel  
Contact - Gold

These values are typical and may not apply to all connectors

## PLUG



## JACK



## Mini UHF Connector



	PLUG		JACK	
	Min	Max	Min	Max
A	1.50	1.65	2.20	2.20
B	5.50	5.50	7.00	7.00
C	6.00	1.27	7.90	8.10
D	6.50	8.00	0.80	2.00
E	-	12.00	4.70	4.70
F	0.63	0.77		
G	-	0.70	6.50	-
I			6.30	0.77
K			-	0.50

### Product listing:



Plug To Jack Adapter





## Volex Group Markets & Industry Segments

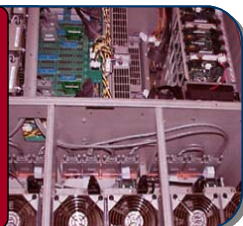
- Wireline networks
- Wireless networks
- Enterprise systems
- Microwave systems

### Telecom



- Servers
- Storage
- Networking products
- Peripherals

### Datacom



- Patient monitoring
- Cardiac resuscitation
- Diagnostic equipment
- Imaging systems

### Medical



- Computers
- Imaging/Printing
- Audio/Visual equipment
- Handheld devices
- Domestic appliances
- Garden & DIY tools

### Consumer



- Air Conditioning
- Refrigeration
- Automation
- Control systems
- Test & Measurement
- Vending machines

### Industrial



- Performance vehicles
- Commercial vehicles
- Agricultural equipment
- Construction equipment
- Aerospace
- Defense

### Transportation





## About the Volex Group:

The Volex Group plc (LSE: VLX) is one of the world's leading producers of electronic and fiber optic cable assemblies and connectors for the aerospace, industrial, consumer, wireless infrastructure and data communications markets. Volex products are engineered and manufactured in the Americas, Europe and Asia and sold by a worldwide sales and marketing organization. With over 100 years of experience in the electronics industry and over \$450 million in annual revenue, Volex offers customers a complete solution for their interconnect needs. More information on Volex can be found at [www.volex.com](http://www.volex.com).

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