## **PRODUCT OVERVIEW**

The Molex Micro-Coaxial connector has a very low profile and works up to 6 GHz making it well suited for wireless LAN applications, mobile phones, radiocommunication equipment, measurement equipment, GPS systems and bluetooth applications.

The cable-mount, right-angle plug is only available terminated either as a complete cable-assembly or pigtail assembly. The connector assembly can be used in conjunction with our surface-mount PCB jacks, which are available in tape-and-reel packaging. Various RF connector interfaces are available as part of the Micro Coaxial complete assembly.

#### Features and Benefits

- DC to 6 GHz
- VSWR 1.40:1 Typical, up to 6 GHz
- Very low mated height, less than 2.50mm
- SMT Jack is packaged in tape and reel
- Designed for 0.80mm, 1.13mm & 1.32mm
- "Drop-in" compatible with U.FL connectors
- A tactile lock confirms plug and jack are fully mated

#### Materials

- Contacts Phosphor bronze, gold plated
- Insulator and base (Jack) LCP
- Insulator (Cable plug) PBT
- Outer contact (Cable plug) Phosphor bronze, tin plated



Micro-Coaxial Microminiature Connector

# SMT Jack Cable Assemblies



## **SPECIFICATIONS**

#### Electrical

Nominal Impedance (Ohms)	Frequency Range (GHz)	Voltage, Working (Vrms)	Insulation Resistance (MOhms)	Center Contact Resistance (MOhms)	Outer Contact Resistance (MOhms)	VSWR at Max. Freq
50	DC-6	60	500	20 max	10 max	1.4 at 6GHz

### Mechanical

Coupling Method	Force to Engage (max)	Force to Disengage	Durability (Cycles)
Snap	4.50 lbs (20N)	1.12 lbs (5N)	30

#### Environmental

Temperature	Vibration:	Thermal Shock:	Corrosion (Salt Spray):	Mechanical Shock:	Moisture Resistance:
(Degrees C)	MIL-STD-202, Method 204	MIL-STD-202, Method 107	MIL-STD-202, Method 101	MIL-STD-202, Method 213	MIL-STD-202, Method 106
-40 to +90	_	-	Test Condition B	Test Condition B	-

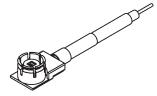


Micro-Coaxial Microminiature Connector

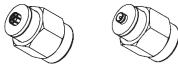
SMT Designs Cable Assemblies

#### **Technical Product Information**

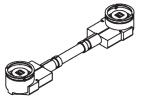
- PCB Jacks Surface-mount
- Cable Plugs Available as Pigtails and complete cable assemblies
- Custom lengths available on request
- Adapters Various between-series adapters available



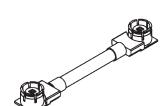
Micro-Coaxial Plug Pigtail On 1.13mm Cable



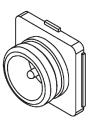
**Between-Series Adapters** 



Micro-Coaxial Plug - Plug On 0.8mm Cable



Micro-Coaxial Plug - Plug On 1.32mm Cable



Surface-Mount Jack

# ORDERING INFORMATION

Part Number	Description	Body	Plating	Cable Type
73412-0110	Surface-Mount Jack	Phosphor Bronze	Gold	N/A
73412-025X	Cable Plug Pigtail	Phosphor Bronze	Tin	1.13mm
73412-028X	Cable Plug - Plug Assembly	Phosphor Bronze	Tin	0.8mm
73412-050X	Cable Plug - Plug Assembly	Phosphor Bronze	Tin	1.32mm
73386-0850	SMA Plug - Micro-Coaxial Plug Adapter	Passivated Stainless Steel	Nickel	N/A
73386-0860	SMA Plug - Micro-Coaxial Jack Adapter	Passivated Stainless Steel	Nickel	N/A
73412-9004	Cable Plug - Plug Assembly	Phosphor Bronze	Tin	1.13mm

Where part numbers end in X:

X denotes various standard lengths available for each cable assembly or Pigtail. See drawings for details of cable lengths and complete ordering codes



# Micro-Coaxial Microminiature Connector

### **Coaxial Cable Information**

Molex uses coaxial cable from various suppliers. The data below is for reference only and is subject to change by the cable manufacturer.

### • Cable Jacket colors available include:

- White
- Black
- Grey
- Red

	0.80mm Cable	1.13mm Cable	1.32mm Cable (Double Shield)	1.37mm Cable
	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Center Conductor	AWG 36 (0.15mm dia.) Stranded (7 strand) Silver Plated	AWG 32 (0.24mm dia.) Stranded (7 strand) Silver Plated	AWG 32 (0.24mm dia.) Stranded (7 Strand) Silver Plated	AWG 30 (0.30mm dia.) Stranded (7 strand) Silver Plated
Dielectric	TFE	TFE	TFE	TFE
	0.40mm diameter	0.68mm diameter	0.68mm diameter	0.88mm diameter
Shield	Silver Plated Copper wire braid	Tin Plated Copper wire braid	(2) Tin Plated Copper wire braids	Tin Plated Copper wire braid
	0.65mm diameter	0.88mm diameter	1.12mm diameter	1.10mm diameter
Jacket	TFE	TFE	TFE	TFE
	0.80mm diameter	1.13mm diameter	1.32mm diameter	1.37mm diameter
Attenuation (dB/Meter)	3.1 dB at 1 GHz 5.8 dB at 3 GHz 9.4 dB at 6 GHz	2.0 dB at 1 GHz 3.6 dB at 3 GHz 5.2 dB at 6 GHz	2.0 dB at 1 GHz 3.6 dB at 3 GHz 5.2 dB at 6 GHz	1.5 dB at 1 GHz 2.7 dB at 3 GHz 4.3 dB at 6 GHz

Molex uses coaxial cable from various suppliers. The data above is for reference only and is subject to change by the cable manufacturer. For a test report, additional details and cable assembly configurations, contact Molex RF/Microwave Connector Division RF@molex.com

# SMT Designs Cable Assemblies



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