# **Microcoaxial Ultra-Microminiature Connector**

SMT Jack Cable Assemblies

The Molex Microcoaxial Connector has a very low profile and works up to 6 GHz making it well suited for wireless LAN applications, mobile phones, radio-communication equipment, measurement equipment, GPS systems and bluetooth applications

The cable-mount, right-angle plug is available 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 a complete microcoaxial assembly.

## **Features and Advantages**

DC to 6 GHz VSWR (max.): 1.3 (DC to 6 GHz)

Very low mated height, less than 2.50mm

SMT Jack is packaged in tape and reel

Cable connectors available for .81mm, 1.13mm, 1.32mm and 1.37mm

"Drop-in" compatible with Microcoaxial Connectors

A tactile lock confirms plug and jack are fully mated

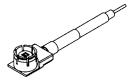
# **Materials**

Contacts - Phosphor Bronze, Gold plated

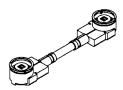
Insulator and base (Jack) - LCP

Insulator (Cable plug) - PBT

Outer contact (Cable plug) - Phosphor Bronze, Gold plated



Microcoaxial Plug Pigtail On 1.13mm Cable



MicroCoaxial Plug -Plug On 0.81mm Cable



**Between-Series Adapters** 







Microcoaxial Plug -

Plug On 1.32mm Cable

Surface-Mount Jack

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SMT Jack Cable Assemblies

# molex

## **Specifications**

#### ELECTRICAL

Nominal Impedance (Ohms): 50 Frequency Range (GHz): DC-6 Voltage, Working (Vrms): 60 Insulation Resistance (mOhms): 500 Center Contact Resistance (mOhms): 20 max. Outer Contact Resistance (mOhms):10 max. VSWR at Max. Freq.: 1.3 at 6 GHz

#### MECHANICAL

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

#### ENVIRONMENTAL

Temperature (Degrees C): -40 to +90 Corrosion (Salt Spray): MIL-STD-202, Method 101: Test Condition B Mechanical Shock: MIL-STD-202, Method 213: Test Condition B

#### 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

# **Ordering Information**

Part Number	Description	Body	Plating	Cable Type
73412-0110	Surface-Mount Jack	Phosphor Bronze	Gold	N/A
73116-001X	Cable Plug Pigtail	Phosphor Bronze	Gold	1.13mm
73116-006X	Cable Plug - Plug Assembly	Phosphor Bronze	Gold	0.81mm
73116-003X	Cable Plug - Plug Assembly	Phosphor Bronze	Gold	1.32mm
73386-0850	SMA Plug - Microcoaxial Plug Adapter	Passivated Stainless Steel	Nickel	N/A
73386-0860	SMA Plug - Microcoaxial Jack Adapter	Passivated Stainless Steel	Nickel	N/A
73116-000X	Cable Plug - Plug Assembly	Phosphor Bronze	Gold	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

# **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

	0.81mm Cable 50 Ohms	1.13mm Cable 50 Ohms	1.32mm Cable (Double Shield) 50 Ohms	1.37mm Cable 50 Ohms
Center Conductor	AWG 36 (0.15mm dia.)	AWG 32 (0.24mm dia.)	AWG 32 (0.24mm dia.)	AWG 30 (0.30mm dia.)
	Stranded (7 strand)	Stranded (7 strand)	Stranded (7 Strand)	Stranded (7 strand)
	Silver Plated	Silver Plated	Silver Plated	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 0.65mm diameter	Tin Plated Copper wire braid 0.88mm diameter	(2) Tin Plated Copper wire braids 1.12mm diameter	Tin Plated Copper wire braid 1.10mm diameter
Jacket	TFE	TFE	TFE	TFE
	0.81mm diameter	1.13mm diameter	1.32mm diameter	1.37mm diameter
Attenuation (dB/Meter)	3.1 dB at 1 GHz	2.0 dB at 1 GHz	2.0 dB at 1 GHz	1.5 dB at 1 GHz
	5.8 dB at 3 GHz	3.6 dB at 3 GHz	3.6 dB at 3 GHz	2.7 dB at 3 GHz
	9.4 dB at 6 GHz	5.2 dB at 6 GHz	5.2 dB at 6 GHz	4.3 dB at 6 GHz

### www.molex.com/link/rfmicrowavecoax.html

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