

Microcoaxial Ultra-Microminiature Connector

SMT Jack Cable Assemblies

molex®

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 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

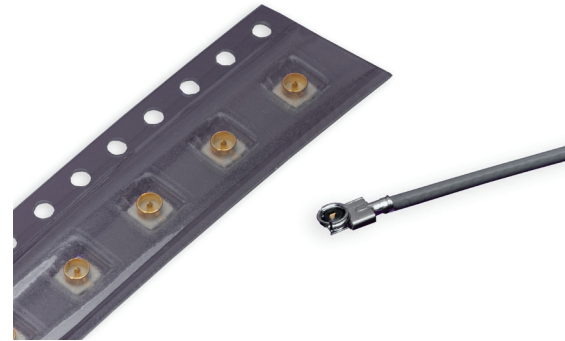
Very low mated height, less than 2.50mm

SMT Jack is packaged in tape and reel

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

"Drop-in" compatible with U.FL connectors

A tactile lock confirms plug and jack are fully mated



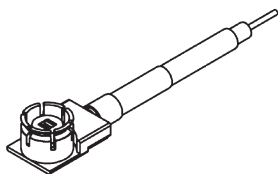
Materials

Contacts – Phosphor bronze, gold plated

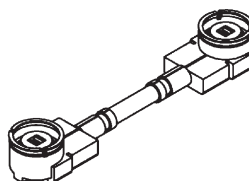
Insulator and base (Jack) – LCP

Insulator (Cable plug) – PBT

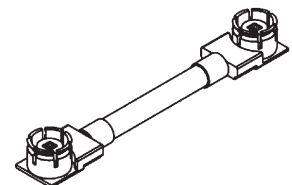
Outer contact (Cable plug) – Phosphor bronze, tin plated



Microcoaxial Plug
Pigtail On 1.13mm Cable



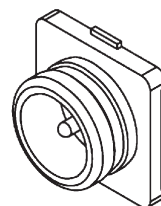
MicroCoaxial Plug -
Plug On 0.81mm Cable



Microcoaxial Plug -
Plug On 1.32mm Cable



Between-Series Adapters



Surface-Mount Jack

Microcoaxial Ultra-Microminiature Connector

SMT Jack Cable Assemblies

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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: 1.4 at 6GHz

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
73412-025X	Cable Plug Pigtail	Phosphor Bronze	Tin	1.13mm
73412-028X	Cable Plug - Plug Assembly	Phosphor Bronze	Tin	0.81mm
73412-050X	Cable Plug - Plug Assembly	Phosphor Bronze	Tin	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
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

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)	1.37mm Cable 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 0.40mm diameter	TFE 0.68mm diameter	TFE 0.68mm diameter	TFE 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 0.81mm diameter	TFE 1.13mm diameter	TFE 1.32mm diameter	TFE 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

www.molex.com/link/rfmicrowavecoax.html