2.2-5 RF Connector System and Cable Assemblies



Molex 2.2-5 RF Connector System and Cable Assemblies deliver high frequency and low passive intermodulation (PIM) in a form factor that is 53% smaller than the 4.3-10 Connector System, making them ideal for compact mobile radio applications

Features and Advantages

Air dielectric interface

Enables superior bandwidth and low insertion loss

Low PIM

Enables wireless service providers to build networks capable of superior performance

Broad cable selection

Offers low losses and long distances



2.2-5 Cable Assemblies with Wrench-Tightened Locking Style

3 mating options: push-pull, wrench tighten, hand tighten

Offers design flexibility, depending on application needs, without compromising electrical performance. Provides easy installation

Ground spring on the panel-mounted jack
Hands PIM control to

Hands PIM control to equipment manufacturer

Robust design, high protection, IP68 NEMA rating

Protects contacts from damage. Delivers mechanical sturdiness. Prevents water and dust ingress



Mated 2.2-5 RF Cable Assembly

Applications

Telecommunications/Networking

Wireless Radios

Antennas

Mobile Communications

Small form factor, miniature design

Provides space savings. Delivers the form factor of TNC Miniature RF Connectors



2.2-5 RF Connector System and Cable Assemblies



Specifications

REFERENCE INFORMATION

Packaging: Tray, Carton

UL File No.: CSA File No.:

Mates with: series 73225 2.2-5
Plugs mate with series 73225 Jacks
Use with: Coaxial or Fit Cable: 12.7mm (0.5")

foam or flexible models Designed in: Millimeters

RoHS: Yes

ELECTRICAL

Voltage: 1800Vrms @ sea level Frequency (max.): DC to 12 GHz

Impedance: 50 Ohms

Dielectric Withstanding Voltage:

2500V AC @ 0.5mA Contact Resistance:

Center Contact: ≤ 1 milliohm Outer Contact: ≤ 1 milliohm

Insulation Resistance: ≥ 5000 Megohms

VSWR:

≤1.03 DC to 4 GHz ≤1.05 4 to 6 GHz

RF Insertion Loss: ≤0.05 x √f (GHz) dB Center Contact Resistance: ≤1 milliohms Outer Contact Resistance: ≤1 milliohms PIM3 (Typical): -166dBc (2x43dBm)

MECHANICAL

Mating Torque: 5 to 8Nm
Coupling Proof Torque: 8Nm
Coupling Nut Retention Force: ≥450N
Engagement Force (Quick Lock): 100N
Disengagement Force (Quick Lock): 80N
Durability: 100 Cycles

Durability: 100 Cycle: Sealing: IP68

PHYSICAL

Housing: Brass

Contact: Phosphor Bronze

Plating:

Contact Area — Silver

Insulator: Teflon

O-Ring: Silicone Rubber

Operating Temperature: -55 to +90°C

Ordering Information

| Series No. | Component |
|--------------|------------|
| <u>73225</u> | 2.2-5 Jack |
| | 2.2-5 Plug |

| Custom Product | Component |
|----------------|----------------------|
| Contact Molex | 2.2-5 Cable Assembly |