

# Multi-Port RF (MPRF) Coaxial Cable-to-Board Solutions



Mitigate I/O coax connection failure in high-vibration environments with rugged and compact MPRF connectors

## Features and Benefits

4-, 6- and 8-port configurations available

Offers design flexibility for applications with space restrictions

3.75mm-pitch, high-density compact array

Accepts 2.10mm cable diameters (RG-316) for PCB space savings

Integrated shell with dual side latches

Enhances strain relief by preventing cable terminations from “rocking” within the mating interface

Contact wipe of 1.00mm nominal

Ensures high mating cycles and proper engagement under vibration

One-piece cable block with removable, snap-in contacts

Provides cost savings via simple installation for customers who prefer to terminate assemblies themselves

Robust outer nylon shell

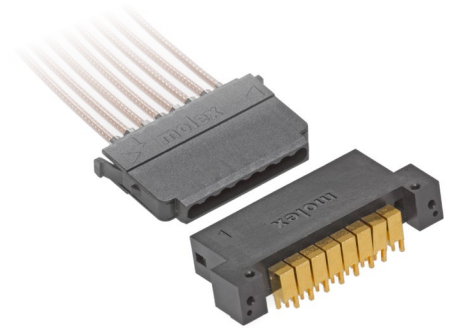
Withstands a minimum of 500 mating cycles. Maintains secure connections that support cable weight

Frequency range DC to 6 GHz

Supports a broad range of potential applications

Non-magnetic versions available

Provides relative permittivity close to 1.0 and high signal-to-noise ratio (SNR) for imaging systems in medical and aerospace applications requiring non-magnetic solutions



**Multi-Port RF (MPRF)  
Cable-to-Board Solution**  
Left: Plug  
Right: Right-Angle Jack,  
8-port Configuration

## Applications

### Telecommunications/Networking

- Hubs
- Servers

### Data/Computing

- Test and Measurement

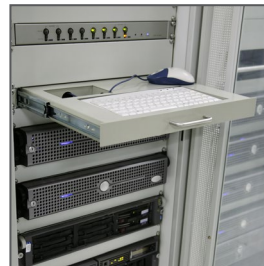
### Medical

- Patient Monitoring
- Imaging

### Aerospace and Defense

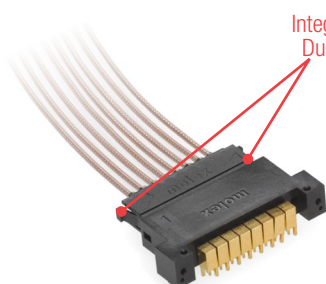


Patient Monitoring/Imaging

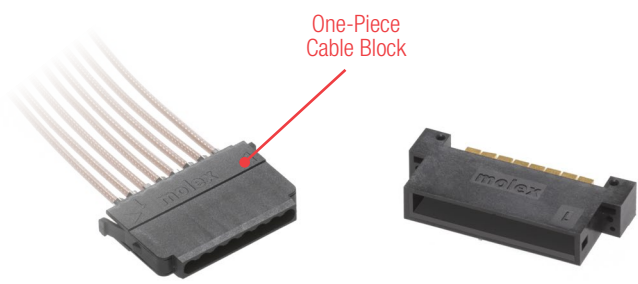


Telecommunication Server

## Additional Product Information



MPRF Mated Plug (left) and Jack (right). Shown with Coax Cable



MPRF Unmated Plug (left) and Jack (right); Available with Removable Snap-In Contacts

# Multi-Port RF (MPRF)

## Coaxial Cable-to-Board Solutions



### Specifications

#### REFERENCE INFORMATION

Packaging: Tray or Bulk  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Yes  
Compatible Coaxial Cable Types:  
Temp-Flex® .086  
RG-178  
RG-316

#### ELECTRICAL

Nominal Impedance: 50 Ohms  
Voltage (max.): 170 Vrms at sea level  
Frequency Rating: DC to 6 GHz  
VSWR (max.): 1.20:1 from DC to 6 GHz  
Insertion Loss: .15dB @ 6 GHz

#### MECHANICAL

Contact Retention Force Per Port (min.): >66N  
Engage/ Disengage Force (max./min.) 6.67N/4.49N  
per port; 53N/35N 8-port connector assembly,  
including latch  
Connector Latch Retention Force (4-, 6-, 8-Port) (min.): 88N  
Connector Latch Durability (min.): 500 Cycles

#### PHYSICAL

Plug Shell: 66 Nylon, Black  
Jack Shell: High-Temperature Nylon, Black  
Non-Magnetic Plug and Jack:  
Brass or Beryllium Copper  
Non-Magnetic Center Contact:  
Brass or Beryllium copper  
Plating:  
Body and Contact — Gold over Nickel  
Non-Magnetic Body and Contact — Gold over  
Electroless Phosphorous Nickel  
Insulators: Teflon  
Operating Temperature: -55 to +165°C

### Ordering Information

Series No.	Component	Ports
<a href="#">73158</a>	Individual Jack, Plugs and Retention Clips	N/A
<a href="#">73358</a>	Ganged Jacks and Plugs	4, 6 and 8

Custom Product	Description
<a href="#">Contact Molex</a>	MPRF Cable Assemblies

[www.molex.com/link/mprf.html](http://www.molex.com/link/mprf.html)