

Plua

## 5G mmWave RF Flex-to-Board Connectors

5G mmWave RF Flex-to-Board Connector, 5G15 Series offers excellent SI performance for high-speed (15 GHz) RF applications, robust mating with vertical and PCB real-estate space-saving features required in highly compact 5G mobile and other communication devices.

Receptacle

5G mmWave RF Flex-to-Board Connectors, 0.35mm Pitch, 0.60mm Height, 5G15 Series

#### **FEATURES AND ADVANTAGES**

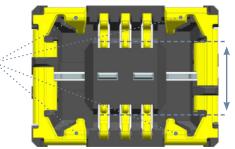
### Receptacle center shield

Isolates each row contributing to a good signal integrity performance for 5G (Sub6, mmWave) and other high-speed applications

### Armored split nail

Protects connector from damage during mating; allows for dual use as Power or Ground \*Maximum current: 2A (1A per pin x 2pins, max.)

### Power(1A max.) or Ground nail



Separation distance between two opposite rows of contacts protects against EMI effects

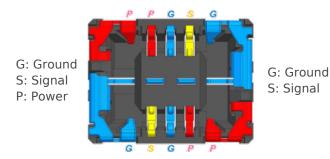
**Ground nail** 

Power(1A max.) or Ground nail

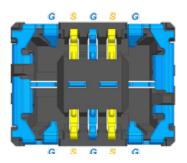
**Ground nail** 

## '2RF Signal lines + Power line' or alternative configuration as '4RF Signal lines (without power)'

Offers design flexibility in pin assignments



2 RF signal line + 1A Power line model



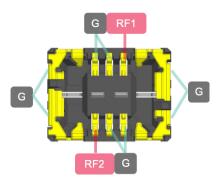
4 RF signal line model

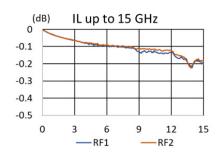


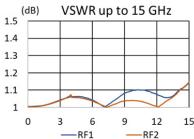
## 5G mmWave RF Flex-to-Board Connectors >

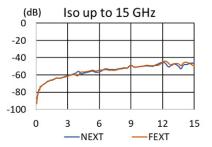
#### **FEATURES AND ADVANTAGES**

#### **Leading Signal Integrity Performance up to 15GHz**









#### MARKETS AND APPLICATIONS

#### Consumer

AR/VR Smartphones Tablet PCs Wearable devices Smart home devices





Drones

5G, tablets and mobile devices

#### Industrial

IoT Portable audio and navigation equipment 5G and RF devices



Patient monitoring systems
Therapeutic and surgical equipment



Drones Unmanned vehicles Aircraft avionics







AR/VR Patient Monitors



# 5G mmWave RF Flex-to-Board Connectors >

#### **SPECIFICATIONS**

#### **Reference Information**

Packaging: Embossed Tape with Cover

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

#### **Electrical**

Voltage (max.): 50V

Current (max.): 0.3A / 1.0A (refer to Product Specifications 2153600000-PS for pin

assignment details)
Contact Resistance (max.):

Signal: 30 milliohms Nail: 20 milliohms

Dielectric Withstanding Voltage: 250V AC (rms)
Insulation Resistance (min.): 100 Megohms

#### **Mechanical**

Pitch: 0.35mm

Mated Height: 0.60mm

Mated Width: 2.30mm

Length (Receptacle): 3.04mm

Structure Type: Vertical type

Circuit Size: 6+4 Circuit

Durability (max.): 10 cycles

#### **Physical**

Housing: LCP Black, UL 94V-0

Contact: Copper Alloy
Plating: Contact Area - Gold
Solder Tail Area - Gold
Underplating - Nickel

Operating Temperature: -40 to +85°C

#### ORDERING INFORMATION

Series	Description
215360	5G mmWave 0.35mm-Pitch Flex-to-Board Receptacle, Series 5G15
215361	5G mmWave 0.35mm-Pitch Flex-to-Board Plug, Series 5G15

www.molex.com/link/slimstack.html