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## **RF Coaxial Terminations**

RF Coaxial Terminations provide superior heat dissipation at power levels up to 50W, deliver precision impedance matching, support frequencies from DC to 40 GHz and offer robust long-term reliability. The terminations help optimize signal integrity and power transfer in high-frequency applications and demanding environments, including telecommunications, broadcasting and aerospace/defense.

### **ADVANTAGES AND FEATURES**

### Offers exceptional durability and environmental resilience

The terminations are engineered with solderless contacts to withstand wide temperature ranges, shock and vibration forces, and harsh environmental conditions.

## Enables compatibility with various RF connector types

Connectors include 2.92mm, N-Type and SMA; also allows for compatibility with 3.50mm, K-type and MIL-STD-348 connectors.

## Provides high performance for precision applications

With a low voltage standing wave ratio (VSWR) typically between 1.20:1 and 1.35:1, and impedance matching to 50 Ohms, these terminations deliver efficient power transfer and reliable performance.

Connector	2.92mm, N-Type, SMA
Power Handling	0.5 to 50W
Frequency	DC to 40 GHz
VSWR (max.)	1.20:1 to 1.35:1
Impedance	50 Ohms
Operating Temperatures	-55 to +125°C (2.92mm) -65 to +125°C (N-Type, SMA)

#### **Delivers reliable power handling**

Precision resistors for various power ratings help ensure terminations deliver consistent power handling across wide temperature ranges.

#### **Offers vertical integration**

Components are manufactured in the US, for enhanced supply chain control.

## Simplifies system design with a range of options

Options include terminations in various power ranges, power-handling capabilities and connector types, including products that comply with stringent aerospace and defense standards.



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## **RF Coaxial Terminations**

#### **MARKETS AND APPLICATIONS**

#### Aerospace/Defense

Electronic warfare systems Radar systems Missile defense systems Military aircraft Global positioning system (GPS) devices Military radios SATCOM uplinks Ship signal exploitation devices Counter-IED systems Simulation systems







Cell-Site Infrastructures



Test and Measurement Equipment

#### Wireless Infrastructure

Wireless devices Cell-site infrastructures Point-to-point communication systems In-flight wireless systems Public safety and transportation systems RF generators 4G/5G/6G testing and measurement equipment Distributed antenna systems

#### Telecommunications

Mobile network testing equipment Wireless communications test systems Broadcasting and multimedia devices Network analyzers Spectrum analyzers Signal generators Test and measurement equipment

#### **SPECIFICATIONS**

#### **RF Coaxial Terminations—2.92mm Connector**

#### **Reference Information**

Packaging: Bag Designed in: Inches RoHS: Yes

#### **Electrical**

Frequency: DC to 40 GHz Voltage Standing Wave Ratio (VSWR): 1.20:1 Input Power: 1W @ +25°C Derated linearity to 0W @ +125°C Impedance: 50 Ohms

#### **Mechanical**

Connector Type: 2.92mm (SMK) Mates with: SMA, K and 3.50mm Length: Male: 0.58" ± 0.05" (14.70 ± 1.30mm) Female: 0.62" ± 0.05" (15.70 ± 1.30mm) Bead Chain: Length: 3.5" (89.00mm) Diameter: 0.13" (3.30mm) Diameter: 0.28" (7.10mm)

#### **Physical**

Housing: Passivated stainlesss steel Conductor: Gold-plated beryllium copper Bead Chain: Passivated stainless steel Operating Temperatures: -55 to +125°C

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#### **SPECIFICATIONS**

#### **RF Coaxial Terminations—N-Type Connector**

#### **Reference Information**

Packaging: Bag Designed in: Inches RoHS: Yes

#### **Electrical**

Frequency: DC to 18 GHz Voltage Standing Wave Ratio (VSWR): DC to 4 GHz: 1.10:1 4 to 8 GHz: 1.15:1 8 to 12.4 GHz: 1.20:1 12.4 to 18 GHz: 1.25:1 Input Power: 2W @ +25°C Derated linearity to 1W @ +125°C Impedance: 50 Ohms

#### Mechanical

Connector Type: N-Type Mates with: MIL-STD-348 Length: Male: 1.17" ± 0.05" (29.70 ± 1.30mm) Female: 1.26" ± 0.05" (32.00 ± 1.30mm) Bead Chain: Length: 3.5" (89.00mm) Diameter: 0.13" (3.30mm) Diameter: 0.56" (14.20mm)

#### **Physical**

Housing: Passivated stainless steel Conductor: Gold-plated beryllium copper Bead Chain: Passivated stainless steel Operating Temperatures: -65 to +125°C

#### **RF Coaxial Terminations—SMA Connector**

#### **Reference Information**

Packaging: Bag Designed in: Inches RoHS: Yes

#### **Electrical**

Frequency: DC to 26.5 GHz Voltage Standing Wave Ratio (VSWR): DC to 4 GHz: 1.05:1 4 to 8 GHz: 1.10:1 8 to 12.4 GHz: 1.15:1 12.4 to 18 GHz: 1.20:1 18 to 26.5 GHz: 1.35:1 Input Power: 1W @ +25°C Derated linearity to 0W @ +125°C Impedance: 50 Ohms

#### **Mechanical**

Connector Type: SMA Mates with: MIL-STD-348 Length: Male: 0.42" ± 0.05" (10.70 ± 1.30mm) Female: 0.54" ± 0.05" (13.70 ± 1.30mm) Bead Chain: Length: 3.5" (89.00mm) Diameter: 0.13" (3.30mm) Diameter: 0.25" (6.40mm)

#### **Physical**

Housing: Passivated Stainless Steel Conductor: Gold-plated beryllium copper or brass Bead Chain: Passivated stainless steel Temperature Coefficient: ± 250 ppm/°C Operating Temperatures: -65 to +125°C

#### www.molex.com