

Fire Rated N Male to N Female Low PIM Cable 24 Inch Length U sing SPF-250 Coax Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

ET28990

Configuration

Connector 1: N Male
Connector 2: N Female
Cable Type: SPF-250

Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- FRPE Jacket
- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

OUTER SHIELD OUTER SHIELD DIELECTRIC SOLID CENTER CONDUCTOR

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- CMR Riser Rated Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication
 Systems
- PIM Testing

Description

Ebeestock's ET28990 type N male to type N female 24 inch cable using SPF-250 coax is part of our full line of RF components available for same-day shipping. Ebeestock's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Ebeestock type N to type N cable assembly has a male to female gender configuration with 50 ohm corrugated SPF-250 coax. The ET28990 type N male to type N female cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 83 | | % |
| Passive Intermodulation | | | -160 | dBc |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Fire Rated N Male to N Female Low PIM Cable 24 Inch Length Using SPF-250 Coax Using Times Microwave Parts ET28990



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| Capacitance | 24 [78.74] | pF/ft [pF/m] |
|-------------|--------------|--------------|
| Inductance | 0.054 [0.18] | uH/ft [uH/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.16 | 0.23 | 0.33 | 0.53 | 0.82 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Length*

24 in [609.6 mm]

Diameter

0 in [0 mm]

Cable

Cable Type
Impedance
Inner Conductor Type

SPF-250
50 Ohms
Solid

Inner Conductor Material and Plating

Copper Clad Aluminum

From PE

Dielectric Type

Number of Shields

1

Outer Conductor Material and Plating

Copper

Jacket Material

Jacket Diameter

Copper

FRPE, Black

0.303 in [7.7 mm]

One Time Minimum Bend Radius
1.25 in [31.75 mm]
Bending Moment
0.5 lbs-ft [0.68 N-m]

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Connectors

| Description | Connector 1 | Connector 2 | |
|---------------------------------------|-------------------------|----------------------|--|
| Type | N Male | N Female | |
| Impedance | 50 Ohms | 50 Ohms | |
| Mating Cycles | | 500 | |
| Contact Material and Plating | Phosphor Bronze, Silver | Brass, Silver | |
| Contact Plating Specification | 196 µin | 200 µin | |
| Dielectric Type | PTFE | PTFE | |
| Outer Conductor Material and Plating | | Brass, Tri-Metal | |
| Outer Conductor Plating Specification | | 100 μin | |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal | |
| Body Plating Specification | 118 µin | 100 μin | |
| Coupling Nut Material and Plating | Brass, Tri-Metal | | |
| Coupling Nut Plating Specification | 118 µin | | |
| Torque | 7.08 in-lbs [0.8 Nm] | 9.74 in-lbs [1.1 Nm] | |

Environmental Specifications Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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www.ebeestock.com



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How to Order

Part Number Configuration:

ET3C8491 - xx uu

Unit of Measure:

cm = Centimeters

chlank> = Inches

Base Number

Example: ET3C8491-12 = 12 inches long cable

ET3C8491-100cm = 100 cm long cable

Fire Rated N Male to N Female Low PIM Cable 24 Inch Length Using SPF-250 Coax Using Times Microwave Parts from Ebeestock Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.ebeestock.com/fire-rated-n-male-to-n-female-low-pim-cable-12-inch-length-using -spf-250-coax-using-times-microwave-parts-0028989

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