

## SMA Male (Plug) Termination (Load) for Cryogenic Application 1 Watt, DC to 18 GHz With Stainless Steel Body



### FMTR1201

#### Features

- Cryogenic Operating Temperature Range -265.15 to 125 deg °C
- DC to 18 GHz Range
- 1 Watt Average Input Power
- VSWR <1.15:1
- SMA Male Coaxial Interface

#### Applications

- Quantum Computing
- Precision Measurements
- Instrumentation
- Prototyping and Characterization

#### Description

Fairview Microwave's FMTR1201 is an RF termination (also called RF load or dummy load) that operates from DC to 18 GHz and handles up to 1 Watt (CW). Our SMA termination/load has a male gender. FMTR1201 SMA load termination offers 1.15:1 VSWR max. The FMTR1201 termination is specially designed and manufactured for cryogenic applications with RF performances guaranteed at 4 kelvin. RF load / termination are indispensable components in many RF, microwave and millimeter wave systems where signal reflections from unused ports can potentially damage the device or reduce the signal integrity. By using a terminator on an unused port with a matched load (dummy load), the incident energy will be absorbed with minimal reflection. These termination components are commonly used to terminate devices such as couplers, circulators, and switches. They are also widely used in measurement systems to ensure accurate results. Fairview Microwave offers a huge selection of RF, microwave and millimeter wave terminations up to 65 GHz with excellent performance over the entire operating range and power handling capabilities up to 800 Watt (CW).

#### Electrical Specifications

| Description                                       | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|-------|
| Frequency Range                                   | DC      |         | 18      | GHz   |
| Impedance   |         | 50      |         | Ohms  |
| VSWR, Input                                       |         | 1.1:1   | 1.15:1  |       |
| Input Power (CW)                                  |         |         | 1       | Watt  |
| Power derates linearly from 45°C to <10°C @ 125°C |         |         |         |       |
| Input Power (Peak)                                |         |         | 500     | Watts |
| 5 µSec PW, <1% duty cycle                         |         |         |         |       |

#### Performance by Frequency

| Description     | F1        | F2        | F3 | F4 | F5 | Units |
|-----------------|-----------|-----------|----|----|----|-------|
| Frequency Range | DC - 12.4 | 12.4 - 18 |    |    |    | GHz   |
| VSWR, Input Max | 1.1:1     | 1.15:1    |    |    |    |       |

#### Mechanical Specifications

##### Size

|        |                   |
|--------|-------------------|
| Length | 0.35 in [8.89 mm] |
| Width  | 0.31 in [7.87 mm] |
| Height | 0.31 in [7.87 mm] |
| Weight | 0.01 lbs [4.54 g] |

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### FMTR1201

|                      |          |
|----------------------|----------|
| <b>Configuration</b> |          |
| Connector            | SMA Male |

#### Material Specifications

| Description         | Material                   | Plating |
|---------------------|----------------------------|---------|
| Connector 1 Contact | Beryllium Copper           | Gold    |
| Insulation          | Teflon                     |         |
| Outer Conductor     | Passivated Stainless Steel | Gold    |
| Coupling Nut        | Passivated Stainless Steel | Gold    |
| Housing             | Passivated Stainless Steel | Gold    |

#### Environmental Specifications

|                    |                       |
|--------------------|-----------------------|
| <b>Temperature</b> |                       |
| Operating Range    | -269.15 to +125 deg C |

#### Compliance Certifications (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

SMA Male (Plug) Termination (Load) for Cryogenic Application 1 Watt, DC to 18 GHz With Stainless Steel Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Male \(Plug\) Termination \(Load\) for Cryogenic Application 1 Watt, DC to 18 GHz With Stainless Steel Body FMTR1201](#)

URL: <https://www.fairviewmicrowave.com/rf-loand-1-watts-18-ghz-chain-sma-male-fmtr1201-p.aspx>

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