

SMA Male (Plug) Termination (Load) 1 Watts To 18 GHz, Passivated Stainless Steel, Push-On, 1.25 VSWR, 50 Watts Peak Power

RF termination (also called RF load or dummy load) ST1820 from Fairview Microwave operates from DC to 18 GHz and handles up to 1 Watt (CW). This SMA termination (or load) has a male gender. ST1820 SMA load termination offers 1.25:1 max VSWR.

RF terminations / loads are critical passive components in many RF, microwave and millimeter wave systems where signal reflection from unused ports can reduce the signal integrity and can potentially damage the device. By terminating an unused port with a matched load (dummy load), the incident energy will be absorbed with minimal reflection. These radio frequency termination components are commonly used to terminate devices such as couplers, circulators, and switches. Loads / terminations are also widely used in measurement systems to ensure accurate results. Fairview offers a large selection of in-stock RF, microwave and millimeter wave terminations up to 65 GHz with great performance over the entire operating range and with power handling capabilities up to 800 Watts (CW).

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
VSWR			1.25:1	
Input Power (CW) derated linearly to 0.5W at +125°C			1	Watt
Input Power (Peak) 5μs pulse, 0.05% duty cycle			50	Watts

Mechanical Specifications

Size	
Length	0.52 in [13.21 mm]
Width	0.315 in [8 mm]
Weight	0.0075 lbs [3.4 g]

Configuration

Connector	SMA Male
Hex Size	5/16 inch
Mating Torque	7 in-lbs [0.79 Nm]
Durability	500 Cycles



Features:

- DC to 18 GHz Frequency Range
- VSWR 1.25:1 Max
- Max Power 1 Watt (CW)
- SMA Male Coaxial Interface

Applications:

- Wireless
- SatCom
- Radar Systems
- Test and Measurement
- Commercial and Military Communication

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Material Specifications

Description	Material	Plating
Connector 1 Contact	Brass	Gold over Nickel 50 μ-in./100 μ-in. min.
Insulation	PTFE	
Body	Passivated Stainless Steel	AMS-5640
Coupling Nut	Passivated Stainless Steel	AMS-5640
Housing	Passivated Stainless Steel	AMS-5640

Environmental Specifications

Temperature

Operating Range

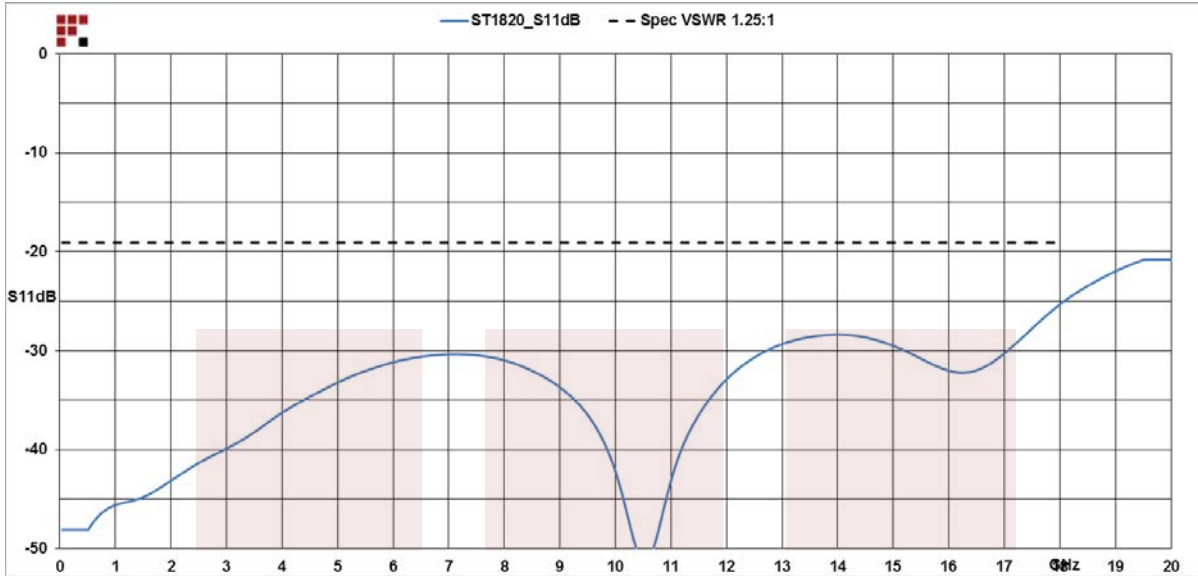
-55 to +125 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data



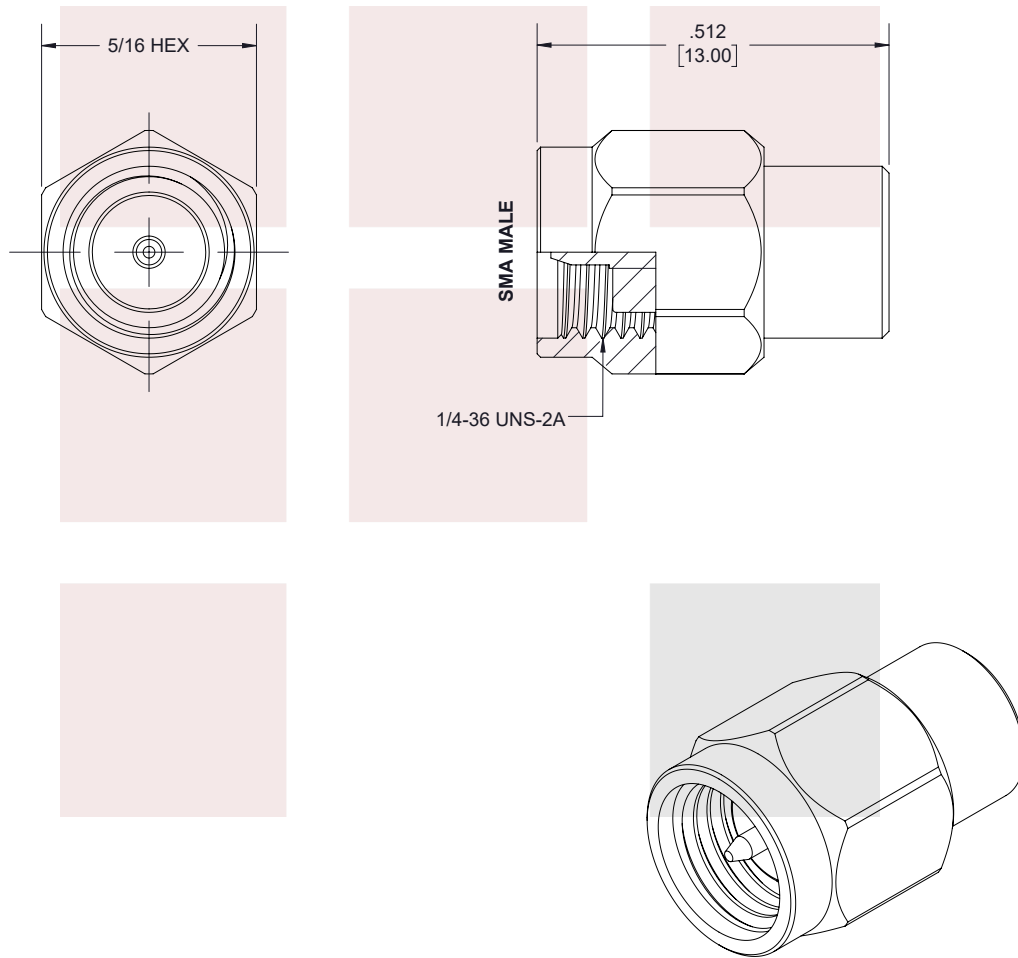
SMA Male (Plug) Termination (Load) 1 Watts To 18 GHz, Passivated Stainless Steel, Push-On, 1.25 VSWR, 50 Watts Peak Power from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Male \(Plug\) Termination \(Load\) 1 Watts To 18 GHz, Passivated Stainless Steel, Push-On, 1.25 VSWR, 50 Watts Peak Power ST1820](#)

URL: <https://www.fairviewmicrowave.com/rf-load-0.5-watts-18-ghz-sma-male-st1820-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR ST1820	8/17/2021	A. GANWANI



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TITLE
SMA Male (Plug) Termination (Load) 1 Watts To 18 GHz, Passivated Stainless Steel, Push-On, 1.25 VSWR, 50 Watts Peak Power

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. ST1820	REV A
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