

ATTENUATOR TEMPERATURE VARIABLE

FEATURES

- Temperature Variable
- Coaxial
- Compact Package
- Wideband Performance
- Passive Compensation
- Rugged Construction
- MIL-PRF-3933

APPLICATIONS

- Mobile Networks
- Instrumentation
- Power Amplifiers
- Base Stations
- Remote Radio Head
- Satellite Communications
- Military Radio

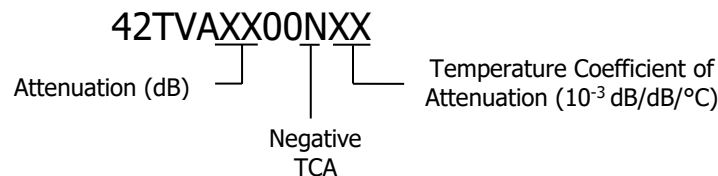


GENERAL DESCRIPTION

Smiths Interconnect is the leading authority in temperature variable attenuators. Thermopad® temperature variable attenuators have been a highly reliable passive solution for over temperature gain compensation for more than 20 years. All Thermopad® products can be qualified for high-reliability and space applications.

ORDERING INFORMATION

Part Identifier:



SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC – 6 GHz
Power Rating:	2 Watts CW
VSWR:	1.20:1 Typical; 1.35:1 Max
Attenuation:	1 – 10 dB in one dB increments
Attenuation Accuracy:	±0.5 dB @ 1 GHz
Temperature Coefficient:	-0.003 through -0.009 dB/dB/°C
Temperature Coefficient Tolerance:	±0.001DB/DB/°C

2.0 ENVIRONMENTAL

Operating Temperature:	-55°C to +150°C
Non-operating Temperature:	-65°C to +150°C

3.0 MARKING

Unit Marking:	FRFL, Part Number
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4.0 QUALITY ASSURANCE

Sample Inspect Per ANSI/ASQC Z1.4 General Inspection, Level II, AQL=1.0.

Visual and Mechanical Examination for Conformance to Outline Drawing Requirements
Sample Inspection (Destructive Testing).

Select three (3) units from lot and measure DCA every 20°C over the temperature range of
-55°C to +125°C; Calculate using linear regression, the slope of the curve.

Calculate TCA using the following formula:

$$TCA = \frac{\text{Slope}}{\text{Attenuation @ } 25^{\circ}\text{C}}$$

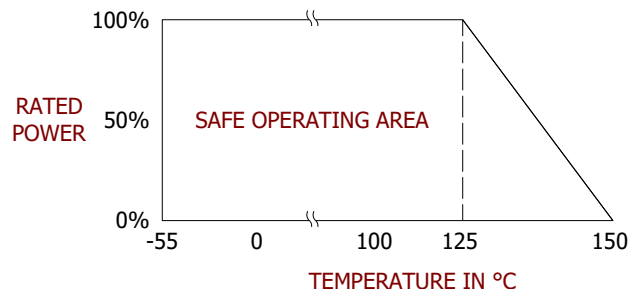
Inspection in accordance with 824W170 and 824F036, for commercial grade product.

5.0 PACKAGING

Standard Packaging: Tube

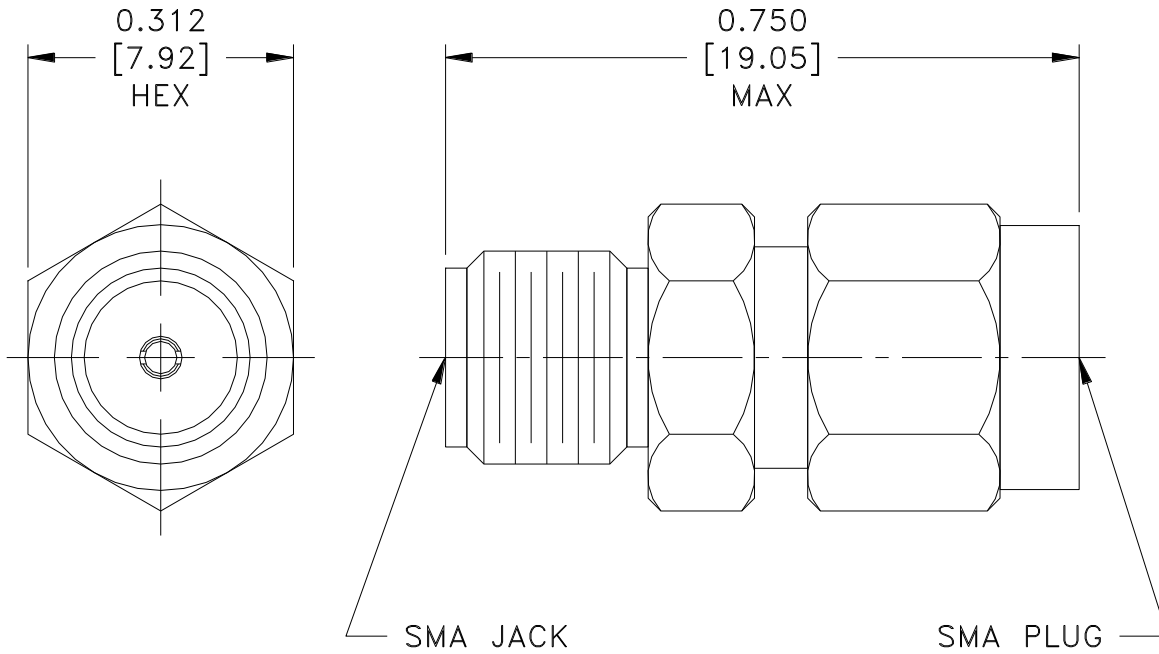
6.0 MECHANICAL

Body and Nut Material:	Passivated Stainless Steel
Body and Nut Finish:	Passivated Stainless Steel
Center Contact Material:	Beryllium Copper
Center Contact Finish:	Gold
Dielectric:	PTFE
Resistive Element:	Thick Film
SMA Interface:	Female/Male
Torque:	7.0 – 8.0 lbf.in
Metric Dimensions:	Provided for reference only



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7.0 MECHANICAL LAYOUT



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.05 X.XXX = ± 0.005