

ATTENUATOR EXTENDED SHIFT TEMPERATURE VARIABLE



DATA SHEET

PART SERIES: ETVAXX00NXX

SHEET 1 OF 3
Dwg 1010935

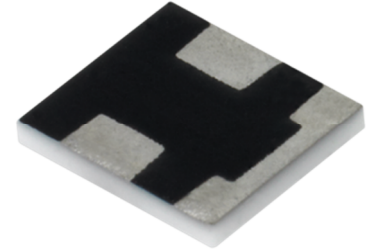
EN 16-0791
Revision D

FEATURES

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

APPLICATIONS

- Power Amplifiers
- Instrumentation
- Mobile Networks
- Point-to-Point Radios
- Satellite Communications
- Military Radios
- Up/Down Converters

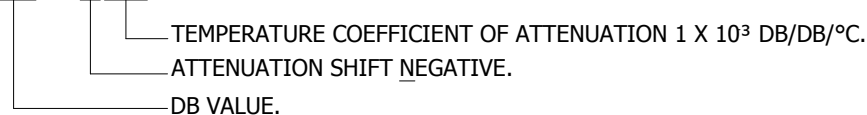


GENERAL DESCRIPTION

EMC Technology 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: ETVAXX00NXX



SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC 3GHz
Attenuation Values Available:	3,4,5 and 6 dB in 1 dB increments
Attenuation Accuracy:	@ 25°C: ± 0.5 dB @ 1GHz
VSWR:	1.30:1 Max. @ 1GHz
Input Power	2 Watts
Temperature Coefficient of Attenuation:	-0.010, -0.011, -0.012, -0.013, -0.014, -0.015, and -0.016 dB/dB/°C
Temperature Coefficient Tolerance:	± 0.002 dB/dB/°C

2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +150°C

3.0 MARKING

Unit Marking: dB value (XX), direction of shift (N) and TCA shift (XX).

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.

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Calculate TCA using the following formula:

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

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

Test Data Requirements:

No Data Required for Customer

Data Retention – 24 Months

5.0 PACKAGING

Standard:

Tape and Reel

6.0 MECHANICAL

Substrate Material:

Alumina, MIL-I-10.

Terminal Material:

Thick Film, Nickel Barrier, Solder Plated.

Workmanship

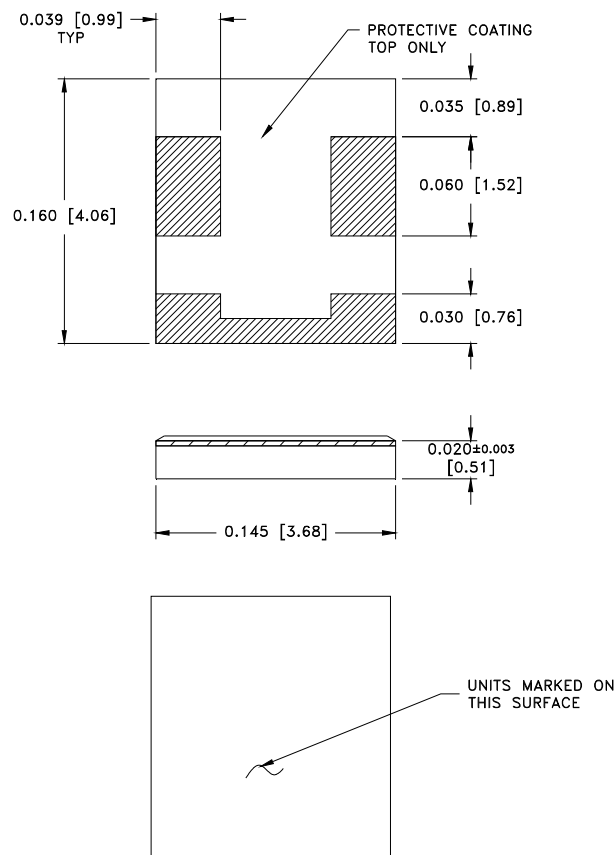
PER MIL-PRF-55342

Resistive Element:

Thick Film.

Metric Dimensions:

Provided for reference only



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.XX X.XXX = ± 0.005

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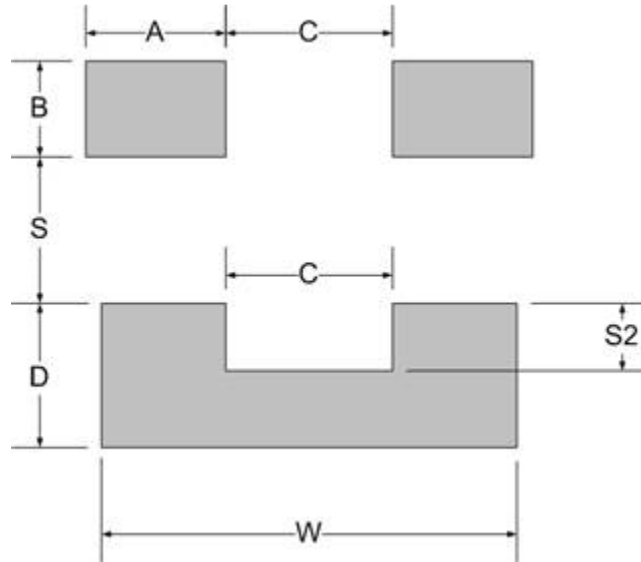
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7.0 FOOTPRINT



Part Number	Inches							mm						
	A	B	C	D	S	S2	W	A	B	C	D	S	S2	W
ETVAXX00NXX	0.039	0.060	0.067	0.030	0.035	0.015	0.145	0.99	1.52	1.70	.76	.89	.38	3.68