

ATTENUATOR TEMPERATURE VARIABLE

DATASHEET PART SERIES: MTVA0X00N0XS

Sheet 1 of 3
Doc# MTVA0X00N0XS-1004975ECO-084244
Revision Y

ORDERING INFORMATION

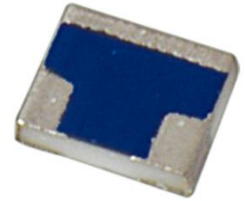
Part Identifier:

MTVA0X00N0XS

X-Temperature Coefficient of Attenuation 1×10^{-3} dB/dB/°C

N-Attenuation Shift Negative

X-dB Value



SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance:	50 Ω
Frequency Range:	-.003, -.004, -.005 DC-18 GHz -.006, -.007, -.009 DC-12.4 GHz
Attenuation Values Available:	1-8 dB in 1 dB increments
Attenuation Accuracy:	@ 25°C: ± 0.5 dB @ 1 GHz
VSWR:	1.30:1 Max @ 1 GHz
Input Power	200 milliwatts cw. Full Rated Power to 125°C, Derated Linearly to 0 watts @ 150°C
Temperature Coefficient of Attenuation:	-0.003, -0.004, -0.005, -0.006, -0.007 and -0.009 dB/dB/°C
Temperature Coefficient Tolerance:	± 0.001 dB/dB/°C

2.0 ENVIRONMENTAL

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

3.0 MARKING

Unit Marking:	DB Value (X), Direction of Shift (N) and TCA Shift (X).
---------------	---

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:

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

Inspection in accordance with 824W107

Test Data Requirements:

No Data Required for Customer

Data Retention – 24 Months

5.0 PACKAGING

Standard:	Tape & Reel
-----------	-------------

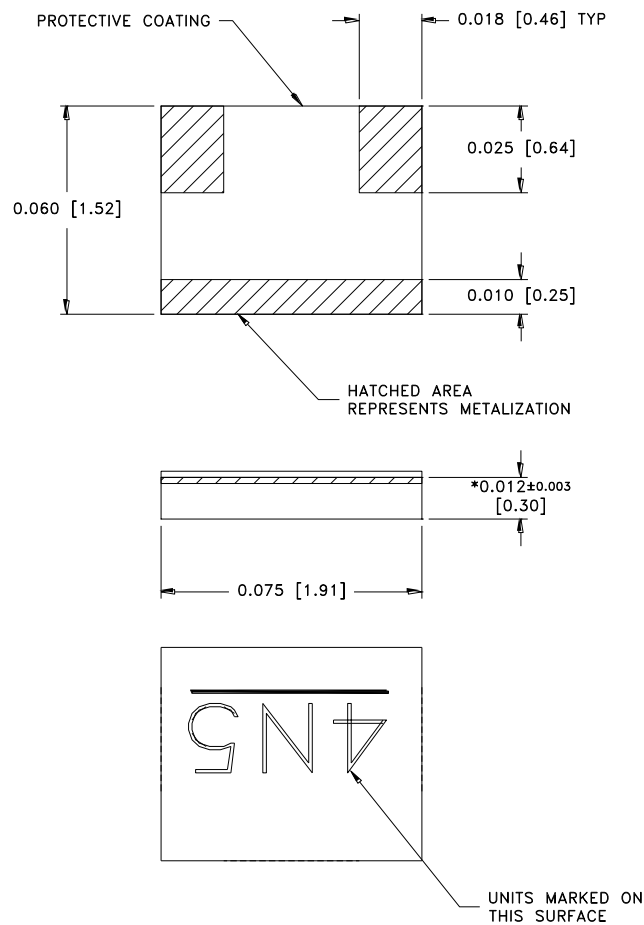
ATTENUATOR TEMPERATURE VARIABLE

DATASHEET PART SERIES: MTVA0X00N0XS

Sheet 2 of 3
Doc# MTVA0X00N0XS-1004975ECO-084244
Revision Y

6.0 MECHANICAL

Substrate Material:	Alumina, 96% MIL-I-10
Terminal Material:	Thick Film, Nickel Barrier, Solder Coated
Workmanship	Per MIL-PRF-55342
Resistive Element:	Thick Film
Metric Dimensions:	Provided for reference only

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

Dimensions apply before solder allow 0.015 max for pre-tinned surfaces.

ATTENUATOR TEMPERATURE VARIABLE

DATASHEET PART SERIES: MTVA0X00N0XS

Sheet 3 of 3
Doc# MTVA0X00N0XS-1004975

ECO-084244
Revision Y

7.0 FOOTPRINT

Part Number	Inches						mm					
	A	B	C	D	S	W	A	B	C	D	S	W
MTVA0X00N0XS	0.022	0.028	0.041	0.013	0.026	0.075	0.56	0.71	1.04	0.33	0.66	1.91

