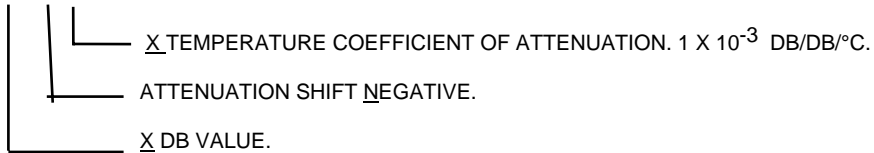


TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: MTVA0X00N0X



DESCRIPTION: TEMPERATURE VARIABLE CHIP ATTENUATOR.

ASSEMBLY DWG: 1900964

1.0 SPECIFICATIONS:

1.1 ELECTRICAL:

- 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
- 1.1.2 OPERATING FREQUENCY RANGE: -.001 THRU -.005 DC – 18 GHZ
-.006 THRU -.009 DC – 12.4 GHZ
- 1.1.3 ATTENUATION VALUES AVAILABLE: 00 – 10 dB.
- 1.1.4 ATTENUATION ACCURACY AT 25°C: ±0.5DB @ 1 GHZ.
- 1.1.5 VSWR: 1.30:1 MAX. @ 1GHZ.
- 1.1.6 INPUT POWER: 200 MILLIWATTS CW.
- 1.1.6.1 FULL RATED POWER TO 125°C, DERATED LINEARLY TO 0 WATTS AT 150°C.
- 1.1.7 TEMPERATURE COEFFICIENT OVER OPERATING TEMPERATURE RANGE: -.001 THRU -.009
TEMPERATURE COEFFICIENT TOLERANCE: ±0.001 DB/DB/°C.

1.2 MECHANICAL:

- 1.2.1 OUTLINE DWG: SEE SHEET 2.
- 1.2.2 WORKMANSHIP: PER MIL-PRF-55342.

1.3 ENVIRONMENTAL:

- 1.3.1 OPERATING TEMPERATURE RANGE: -55°C TO +150°C

2.0 UNIT MARKING: DB VALUE (X), DIRECTION OF SHIFT (N) AND TCA SHIFT (X).
LEGIBILITY AND PERMANENCY PER MIL-STD-130.

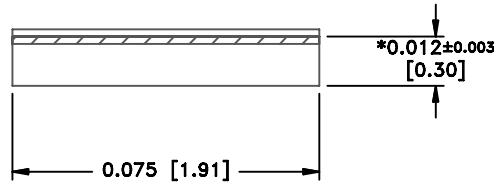
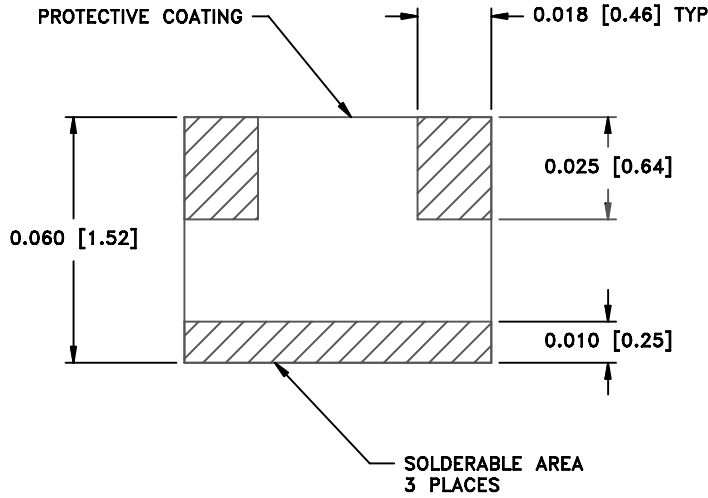
3.0 QUALITY ASSURANCE:

- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
 - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DRAWING REQUIREMENTS.
- 3.2 SAMPLE INSPECTION (DESTRUCTIVE TESTING).
 - 3.2.1 SELECT THREE (3) UNITS FROM LOT AND MEASURE DCA EVERY 20°C OVER THE TEMPERATURE RANGE -55°C TO +125°C.
 - 3.2.1.1 CALCULATE, USING LINEAR REGRESSION, THE SLOPE OF THE CURVE.
 - 3.2.1.2 CALCULATE TCA USING THE FOLLOWING FORMULA:

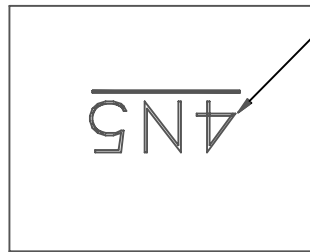
$$TCA = \frac{SLOPE}{ATTENUATION @ 25^{\circ}C}$$
 - 3.2.1.3 ACCEPTANCE LIMITS: PER 1.1.7.
- 3.3 INSPECTION IN ACCORDANCE WITH 824W170 FOR COMMERCIAL GRADE PRODUCT.
- 3.4 TEST DATA REQUIREMENTS:
 - 3.4.1 NO TEST DATA REQUIRED FOR CUSTOMER.
 - 3.4.2 DATA RETENTION - 24 MONTHS.

4.0 PACKAGING: STANDARD PACK PER 755W002.

EMC TECHNOLOGY 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1007725000
	CHANGE NOTICE	EN 10-1300	REV LVL	AJ
			SHEET	1 OF 2



UNITS MARKED ON
THIS SURFACE
VALUE SHOWN TO
(REPRESENT ORIENTATION)



MECHANICAL SPECIFICATIONS:

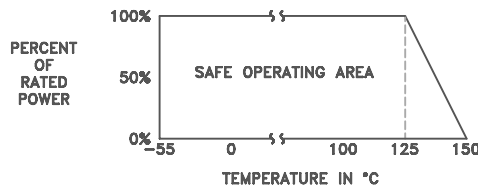
SUBSTRATE:
MATERIAL - ALUMINA 96%, MIL-I-10.

TERMINAL:
MATERIAL - THICK FILM, NICKEL BARRIER,
SOLDER PLATED.

RESISTIVE ELEMENT:
MATERIAL - THICK FILM.

METRIC EQUIVALENTS GIVEN IN [mm]
FOR REFERENCE INFORMATION ONLY

POWER RATING AND DERATING



8851 SW OLD KANSAS AVE
STUART, FL 34997
PHONE NO. (772) 286-9300
FAX NO. (772) 283-5286

UNLESS OTHERWISE
SPECIFIED DIMENSIONS
ARE IN INCHES

TOLERANCES

FRACT --- ---
ANG --- ---
XX --- ---
XXX ±0.005
XXXX --- ---

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CAGE CODE 24602	SCALE 32:1	DRAWN BY JG 11/11/10	CHECKED BY	APPROVED BY
REV AJ	CHANGE NOTICE EN 10-1300	DRAWING NO 1007725000	SHEET 2 OF 2	