

TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: MTVAW3-CUSTOM [CUSTOMIZABLE MTVAW3 KIT]

**25 PIECES OF EACH PART NUMBER SELECTED.
12 MTVA0X00N0XW3 CUSTOMER TO PICK ATTENUATION AND SHIFT.
SEE BELOW FOR AVAILABLE VALUES.**

MTVA0X00N0XW3

X = TEMPERATURE COEFFICIENT OF ATTEN. 1×10^{-3} DB/DB/°C.
N = ATTENUATION SHIFT NEGATIVE.
X DB VALUE SEE TABLE BELOW.

SHIFT (NEG)	DB VALUE
-003	1, 2, 3, 4, 5, 6, 7, 8
-004	1, 2, 3, 4, 5, 6
-005	1, 2, 3, 4, 5, 6, 8
-006	3, 4, 5, 6
-007	2, 3, 4, 5, 6
-009	1, 2, 3, 4, 5, 6, 8

DESCRIPTION: TEMPERATURE VARIABLE CHIP ATTENUATOR CUSTOM KIT.

ASSEMBLY DWG: 2402834

1.0 SPECIFICATIONS:

1.1 ELECTRICAL:

- 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
- 1.1.2 OPERATING FREQUENCY RANGE: DC - 12.4GHZ.
- 1.1.3 ATTENUATION VALUES AVAILABLE: SEE TABLE ABOVE.
- 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:
SEE TABLE ABOVE. 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:

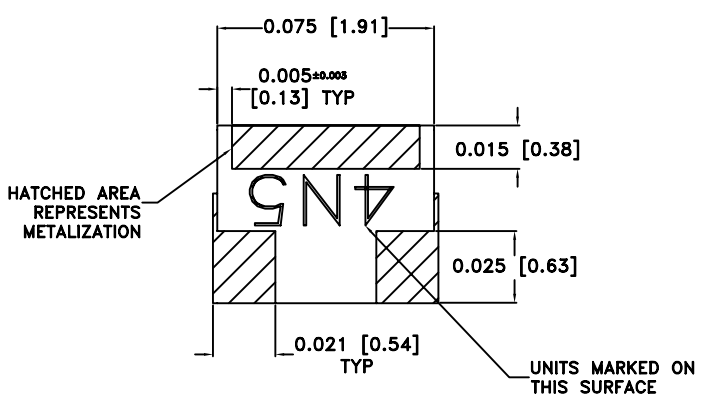
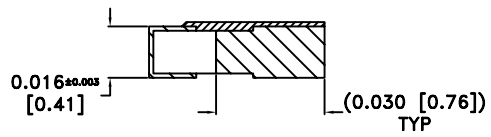
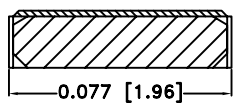
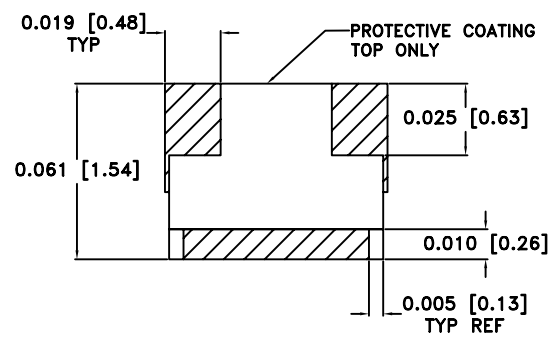
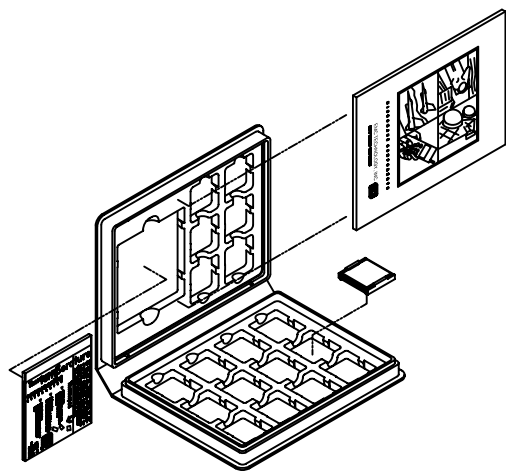
- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
 - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DRAWING REQUIREMENTS.
- 3.2 SAMPLE INSPECTION (DESTRUCTIVE TESTING).
 - 3.2.1 SELECT THREE (3) UNITS FROM LOT AND MEASURE DCA EVERY 20°C OVER THE TEMPERATURE 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 AND 824F036 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 #	1012075000
	CHANGE NOTICE	EN 09-E0726	REV LVL	-
			SHEET	1 OF 2

PART ID REF
MTVAW3-CUSTOM

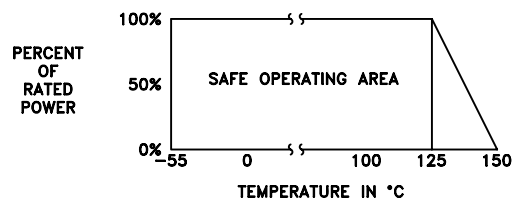


MECHANICAL SPECIFICATIONS:

SUBSTRATE:
MATERIAL - ALUMINA 96%, MIL-I-10.
TERMINAL:
MATERIAL - THICK FILM, NICKEL BARRIER, SOLDER COATED.
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 --- XXXX ---	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF EMC TECHNOLOGY INC AND SHALL NOT BE DUPLICATED OR USED AS BASIS FOR THE MANUFACTURE OR SALE OF PARTS OR DEVICES WITHOUT PERMISSION.				
	CAGE CODE 24602	SCALE 1:4	DRAWN BY JG 7/23/09	CHECKED BY	APPROVED BY	
	REV -	CHANGE NOTICE EN 09-E0726	DRAWING NO 1012075000	SHEET 2 OF 2		