

**TITLE: SPECIFICATION CONTROL DRAWING**

**PART IDENTIFIER: AN7-CUSTOM [CUSTOMIZABLE AN7 KIT]**

**25 PIECES OF EACH PART NUMBER SELECTED.  
5 AN7-XNXF CUSTOMER TO PICK ATTENUATION AND SHIFT.  
SEE BELOW FOR AVAILABLE VALUES.**

**PART IDENTIFIER REF: AN7-XNXF**

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

SHIFT (NEG)	DB VALUE	FREQUENCY RANGE
-003	2, 3, 4, 5, 6	DC – 6 GHZ
-004	2, 3, 4, 5, 6	
-005	3, 4, 5, 6	
-006	3, 4, 5, 6	
-007	3, 4, 5, 6	
-008	3, 4, 5, 6	
-009	3, 4, 5, 6	

\*CONSULT FACTORY FOR ADDITIONAL VALUES.

**DESCRIPTION: TEMPERATURE VARIABLE CHIP ATTENUATOR. (ROHS COMPLIANT)**

**ASSEMBLY DWG: 2402804**

**1.0 SPECIFICATIONS:**

**1.1 ELECTRICAL:**

- 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
- 1.1.2 OPERATING FREQUENCY RANGE: SEE TABLE ABOVE.
- 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: 100 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: ORIENTATION "T"**

LEGIBILITY AND PERMANENCY PER MIL-STD-130

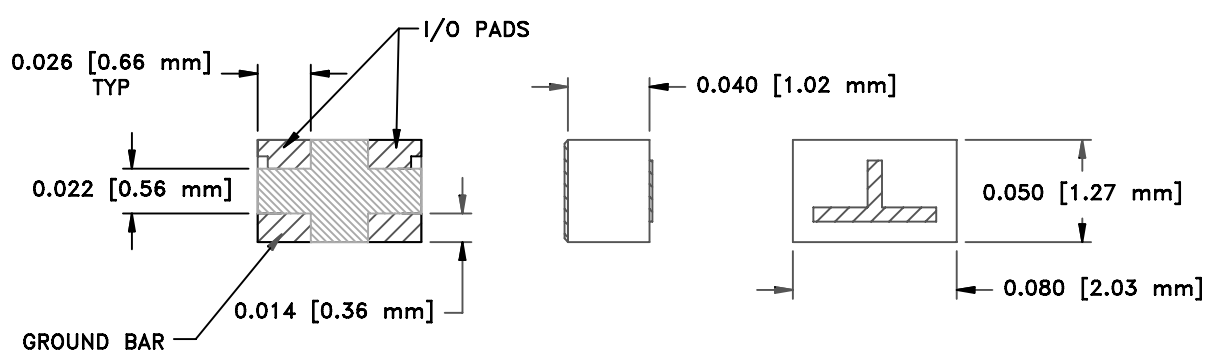
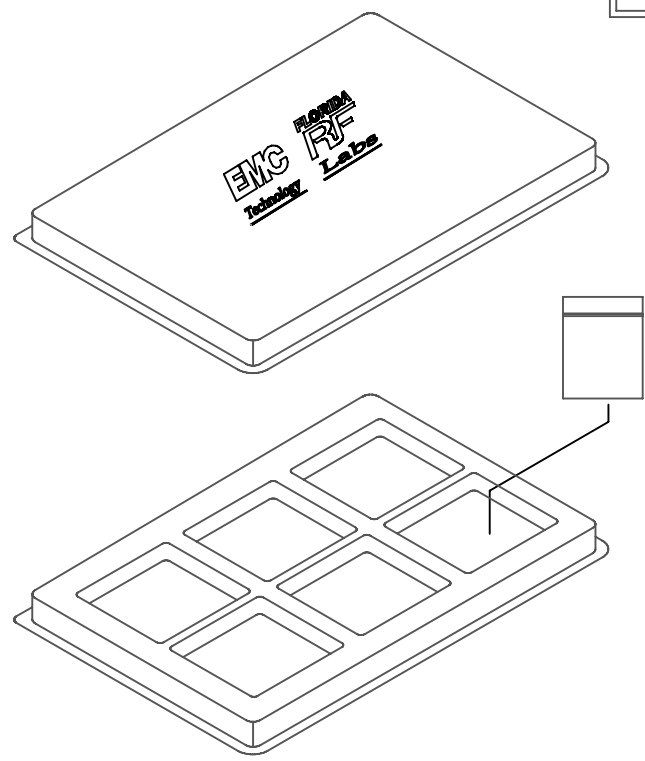
**3.0 QUALITY ASSURANCE:**

- 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 WAFFLE PACK PER 755W002.**

<b>EMC TECHNOLOGY</b> <b>8851 SW OLD KANSAS AVE.</b> <b>STUART, FL 34997</b>	<b>CAGE CODE # 24602</b>		<b>DWG #</b>	1012005000
	<b>CHANGE NOTICE</b>	EN 10-0826	<b>REV LVL</b>	A
			<b>SHEET</b>	1 OF 2

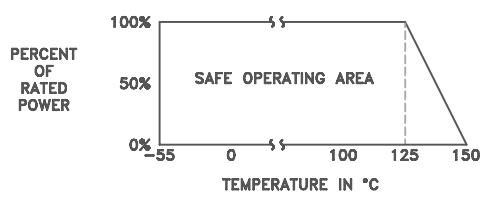


**MECHANICAL SPECIFICATIONS:**

SUBSTRATE:  
MATERIAL - ALUMINA 96%, MIL-I-10.  
TERMINAL:  
MATERIAL - THICK FILM, RoHS COMPLIANT  
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 <b>24602</b>	SCALE <b>32:1</b>	DRAWN BY <b>JG 12/11/10</b>	CHECKED BY	APPROVED BY
REV <b>A</b>	CHANGE NOTICE <b>EN 10-0826</b>	DRAWING NO <b>1012005000</b>	SHEET <b>2 OF 2</b>	