## TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: AN7-XNXF

X = TEMPERATURE COEFFICIENT OF ATTENUATION. 1 X 10<sup>-3</sup> DB/DB/°C. N = ATTENUATION SHIFT NEGATIVE.

X = DB VALUE SEE TABLE BELOW.

SHIFT (NEG)	DB VALUE	FREQUENCY RANGE
00 <u>3</u>	2, 3, 4, 5, 6	
00 <u>4</u>	2, 3, 4, 5, 6	
00 <u>5</u>	3, 4, 5, 6	
00 <u>6</u>	3, 4, 5, 6	DC – 6 GHZ
00 <u>7</u>	3, 4, 5, 6	
00 <u>9</u>	3, 4, 5, 6	

\*CONSULT FACTORY FOR ADDITIONAL VALUES.

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

# ASSEMBLY DWG: 1902114

#### 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 THRÈE (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 = <u>SLOPE</u>. ATTENUATION @ 25°C

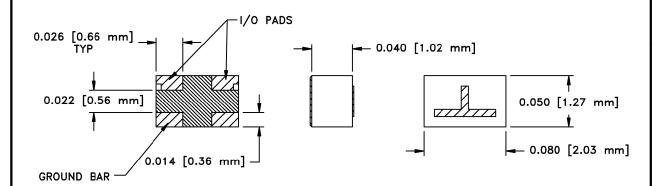
3.2.1.3 ACCEPTANCE LIMITS: PER 1.1.7.

- 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 TAPE AND REEL PACK PER 755W002.

EMC TECHNOLOGY	CA	DWG#	1011505000			
8851 SW OLD KANSAS AVE.	CHANGE NOTICE	EN 09-E0497	REV LVL	D		
STUART, FL 34997			SHEET	1	OF	2

PART ID REF

U.S. PATENT NO. 5332981



### MECHANICAL SPECIFICATIONS:

SUBSTRATE:

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

TERMINAL:

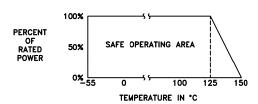
MATERIAL - THICK FILM, ROHS COMPLIANT

RESISTIVE ELEMENT:

MATERIAL - THICK FILM.

METRIC EQUIVALENTS GIVEN IN [mm] FOR REFERENCE INFORMATION ONLY

## POWER RATING AND DERATING



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	TOLERANCES	CAGE CODE	SCALE	DRAWN BY	CHECKED BY	APPI	ROVED B	BY	
<u>Technology</u>	FRACT	24602	32:1	CRH 05/20/09					
8851 SW OLD KANSAS AVE	ANG XX	REV CHA	NGE NOTIC	E	DRAWING NO	•	SHEET		
STUART, FL 34997 PHONE NO. (772)286-9300	XXX ±0.005 XXXX	D	FN	09-F0497	101150500	00	2	OF	2
FAX NO. (772)283-5286							ı –	•.	-