## TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: HR05XXXW3

(X)=TEST CODE: A=GROUP A; B=GROUP B; C=GROUP C

(XX)=DB VALUE (01-20DB)

**DESCRIPTION:** CHIP ATTENUATOR WITH HIGH RELIABILITY TESTING.

NOTE: SINGLE LOT AND DATE CODE AVAILABLE UPON REQUEST.

**ASSEMBLY DWG: N/A** 

#### 1.0 SPECIFICATIONS:

- 1.1 ELECTRICAL:
  - 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
  - 1.1.2 FREQUENCY RANGE: DC-12.4GHZ.
  - 1.1.3 ATTENUATION VALUES AVAILABLE: 0-20DB IN 1DB INCREMENTS.
  - 1.1.4 ATTENUATION ACCURACY: SEE TABLE.
  - 1.1.5 ATTENUATION STABILITY: 0.0001 DB/DB/C°

ATTENUATION ACCURACY					
DB	DC - 4 GHZ	4 - 8 GHZ	8 - 12.4 GHZ		
0	-0,+.3	-0,+.5	-0,+.5		
1 -3	±0.3	±0.5	±0.5		
4 - 6	±0.4	±0.5	±0.5		
7 - 10	±0.5	±0.5	±0.75		
11 - 15	±0.75	+0.5,-3.0	+0.5,-3.5		
16 - 20	±1.0	+0.5,-4.0	+1.0,-6.0		

1.1.7 INPUT POWER: 100 MILLIWATTS CW.

1.1.7.1 FULL RATED POWER TO 125°C, DERATED LINEARLY TO 0 WATTS AT 150°C.

1.1.7.2 PEAK POWER, 1 WATT FOR 10US PULSE WIDTH @ 1% DUTY CYCLE.

#### 1.2 MECHANICAL:

- 1.2.1 OUTLINE DWG: SEE SHEET 3.
- 1.2.2 WORKMANSHIP: PER MIL-PRF-55342.

### 1.3 ENVIRONMENTAL:

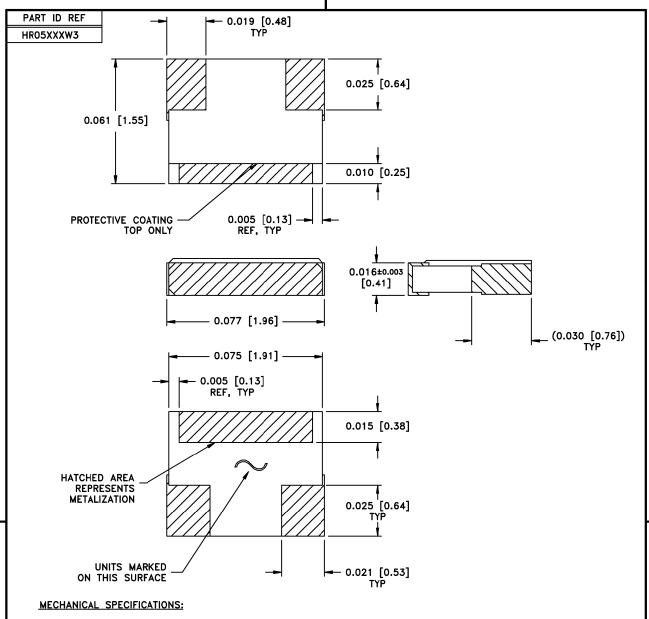
- 1.3.1 ALTITUDE:
  - 1.3.1.1 NON-OPERATING: SEA LEVEL TO 50,000 FEET.
  - 1.3.1.2 OPERATING: SEA LEVEL TO 50,000 FEET.
- 1.3.2 TEMPERATURE RANGE:
  - 1.3.2.1 NON-OPERATING: -55° C TO +150° C.
  - 1.3.2.2 OPERATING: -55°C TO +150°C.
- 1.3.3 VIBRATION: PER MIL-STD-202, METHOD 204, COND. D.
- 1.3.4 SHOCK: PER MIL-STD-202, METHOD 213, COND. I.
- 1.3.5 MOISTURE RESISTANCE: PER MIL-STD-202, METHOD 106 EXCEPT SUBCYCLE STEPS 7A AND 7B AND POLARIZATION AND LOAD ARE NOT APPLICABLE.
- 2.0 UNIT MARKING: MARKED WITH DB VALUE.

LEGIBILITY AND PERMANENCY PER MIL-STD-130.

# 3.0 QUALITY ASSURANCE:

- 3.1 VERIFY 100% VISUAL PRE-CAP INSPECTION PERFORMED PER TP-8965.
- 3.2 PREFORM GROUP A, B AND/OR C TESTING AS INDICATED BY THE PART NUMBER PER TP-8965.
- 3.3 TEST DATA REQUIREMENTS:
  - 3.3.1 TEST DATA REQUIRED FOR CUSTOMER SEE PARAGRAPH 5.0 OF TP-8965.
  - 3.3.2 DATA RETENTION 24 MONTHS.
  - 3.3.3 TEST SAMPLES REQUIRED FOR CUSTOMER SEE PARAGRAPH 5.0 OF TP-8965.
- 4.0 PACKAGING: STANDARD PACK PER 755W002. (SERIALIZED WAFFLE PACK)

EMC TECHNOLOGY	CAGE CODE # 24602		DWG#	1009995000
8851 SW OLD KANSAS AVE.	CHANGE NOTICE	EN 09-E1001	REV LVL	С
STUART, FL 34997			SHEET	1 <u>OF</u> 2



SUBSTRATE:

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

TERMINAL:

MATERIAL - THICK FILM, NICKEL BARRIER, SOLDER PLATED.

RESISTIVE ELEMENT:

MATERIAL - THIN FILM, TANTALUM NITRIDE.

METRIC EQUIVALENTS GIVEN IN [mm] FOR REFERENCE INFORMATION ONLY

## POWER RATING AND DERATING

100% PERCENT OF RATED POWER SAFE OPERATING AREA 50% 0%\_55 100 125 TEMPERATURE IN °C

PHONE NO. (772)286-9300 FAX NO. (772)283-5286 FAX NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES					
TOLERANCES					
FRACT					
ANG					
XX					

±0.005

XXX

l xxxx

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CAGE CODE SCALE DRAWN BY CHECKED BY APPROVED BY 24602 32:1 JG 9/28/09

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