

TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: HR05XXXW1

(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

- 1.1.6 VSWR: DC - 4 GHZ - 1.25 MAX 8 - 12.4 GHZ - 1.50 MAX
 4 - 8 GHZ - 1.35 MAX
- 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.
- 1.4 ELECTROSTATIC DISCHARGE CONTROL: PER MIL-STD-1686.

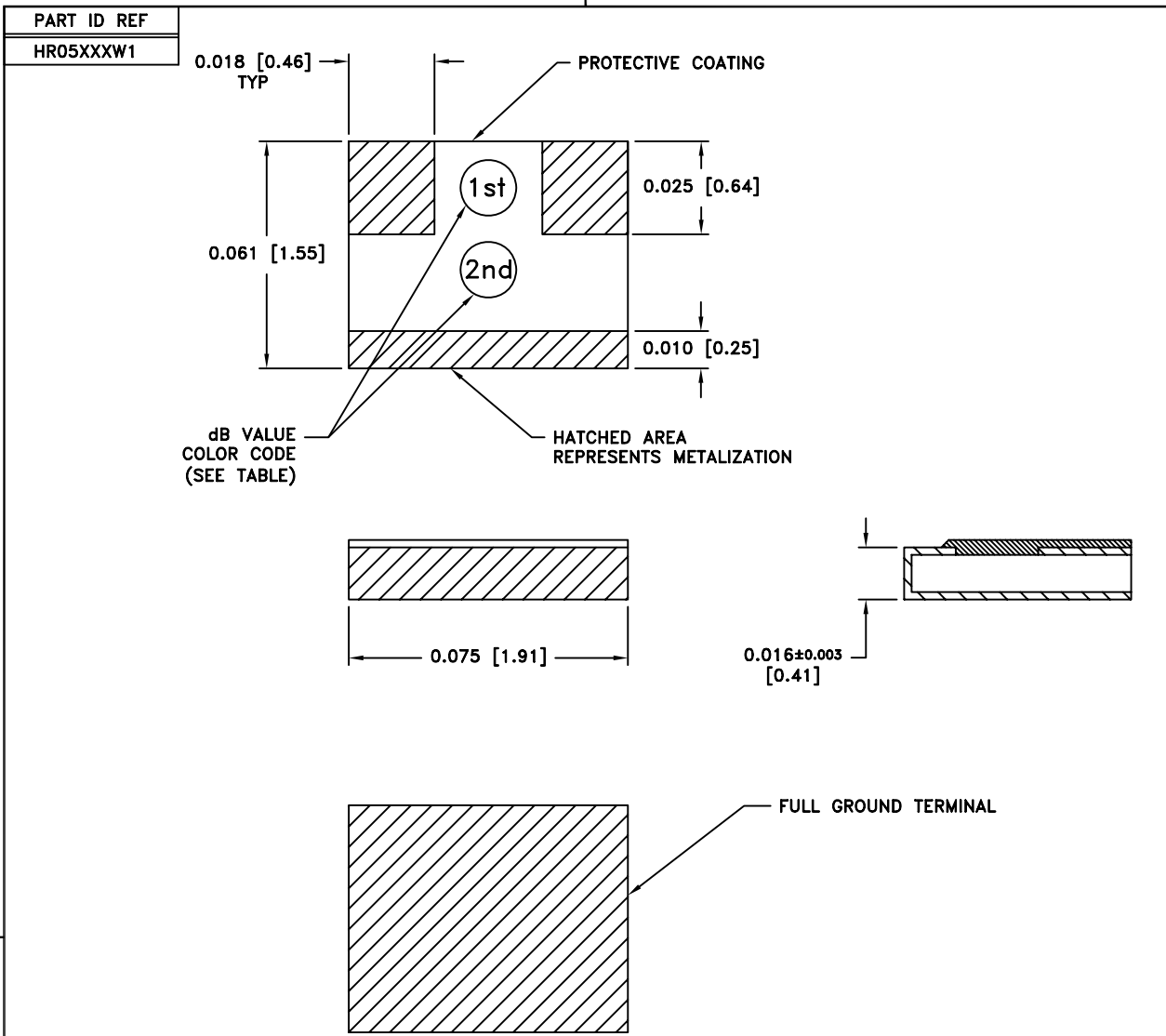
2.0 UNIT MARKING: MARKED ONLY WITH COLOR DOT.
 LEGIBILITY AND PERMANENCY PER MIL-STD-130.

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 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1009975000
	CHANGE NOTICE	EN 09-E1001	REV LVL	B
			SHEET	1 <u>OF</u> 2



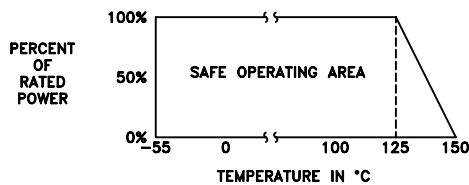
MECHANICAL SPECIFICATIONS:

SUBSTRATE:
 MATERIAL - ALUMINA, MIL-I-10.
TERMINAL & GROUND PLANE:
 MATERIAL - THICK FILM, NICKEL BARRIER,
 SOLDER PLATED.
RESISTIVE ELEMENT:
 MATERIAL - THIN FILM, TANTALUM NITRIDE.

METRIC EQUIVALENTS GIVEN IN [mm]
 FOR REFERENCE INFORMATION ONLY

REFERENCE TABLE					
dB VAL	DOT COLOR		dB VAL	DOT COLOR	
	1st	2nd		1st	2nd
1	BRN	---	11	BRN	BRN
2	RED	---	12	BRN	RED
3	ORG	---	13	BRN	ORG
4	YEL	---	14	BRN	YEL
5	GRN	---	15	BRN	GRN
6	BLU	---	16	BRN	BLU
7	VIO	---	17	BRN	VIO
8	GRY	---	18	BRN	GRY
9	WHT	---	19	BRN	WHT
10	BRN	BLK	20	RED	BLK

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 ---	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	SCALE	DRAWN BY	CHECKED BY	APPROVED BY		
	24602	32:1	JG 12/8/04		DAR 12/8/04		
	REV	CHANGE NOTICE		DRAWING NO	SHEET		
B	EN 09-E1001		1009975000	2 OF 2			