TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: HR05XXXW1S
(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 WATTS 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:

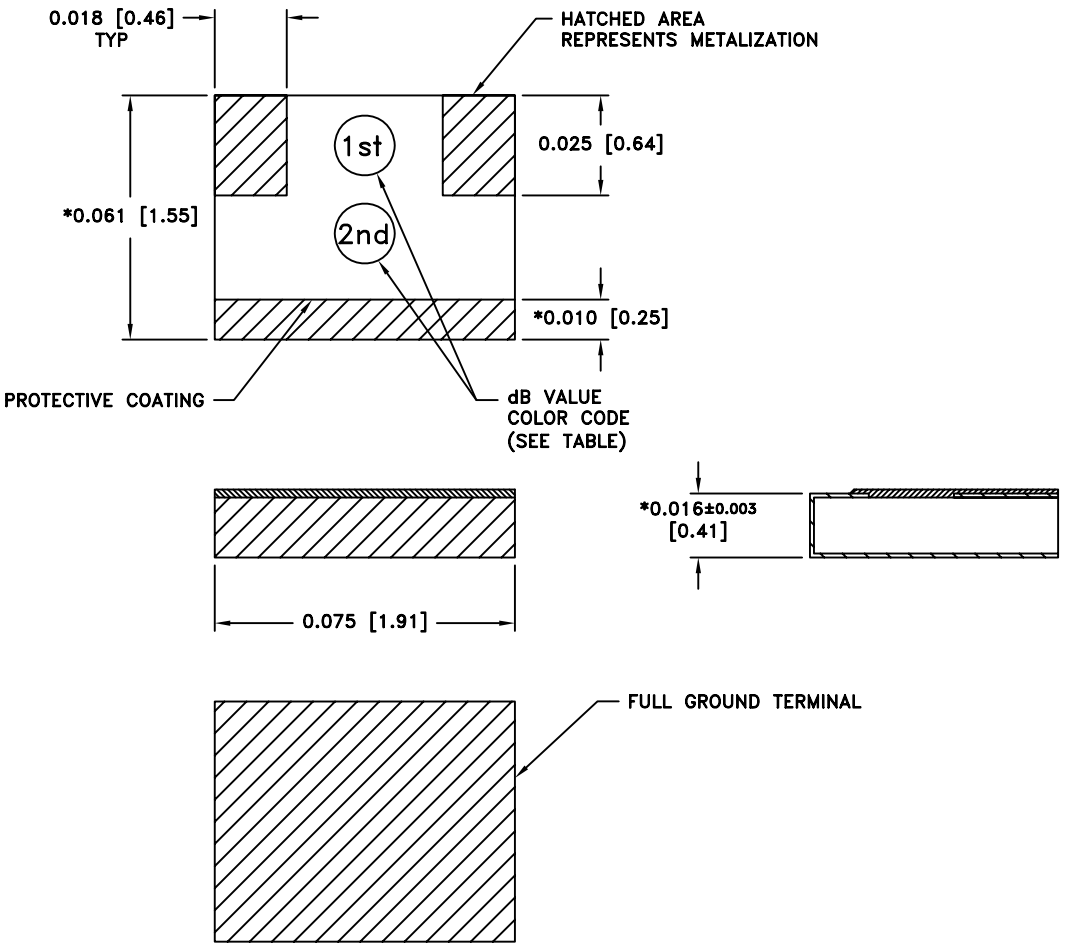
3.3.1 TEST DATA REQUIRED FOR CUSTOMER - SEE PARAGRAPH 5.0 OF TP-8965.

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)

PART ID REF
HR05XXXW1S



MECHANICAL SPECIFICATIONS:

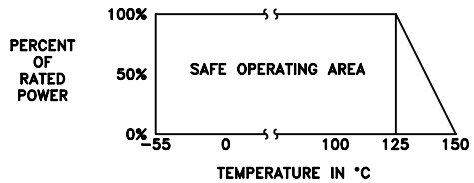
SUBSTRATE:
MATERIAL – ALUMINA 96%, MIL–I–10.
TERMINAL & GROUND PLANE:
MATERIAL – THICK FILM, NICKEL BARRIER, SOLDER COATED.
RESISTIVE ELEMENT:
MATERIAL – THIN FILM, TANTALUM NITRIDE.

E SOLDER. ALLOW
0.015 MAX FOR ALL PRETINNED SURFACES.

METRIC EQUIVALENTS GIVEN IN [mm]
FOR REFERENCE INFORMATION ONLY

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

POWER RATING AND DERATING



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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES
FRACT -- --
ANG -- --
XX -- --
XXX ±0.005
XXXX -- --

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	1009985000	2 OF 2