

TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: TS05XXW1S
(XX) DB VALUE

DESCRIPTION: CHIP ATTENUATOR

ASSEMBLY DWG: 1900714

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.

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

- 1.1.5 VSWR: DC - 4 GHZ - 1.25 MAX 8 - 12.4 GHZ - 1.50 MAX
4 - 8 GHZ - 1.35 MAX
- 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.
 - 1.1.6.2 PEAK POWER, 1 WATTS FOR 10US PULSE WIDTH @ 1% DUTY CYCLE.
- 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 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 ONLY WITH COLOR DOT.
LEGIBILITY AND PERMANENCY PER MIL-STD-130.

3.0 QUALITY ASSURANCE:

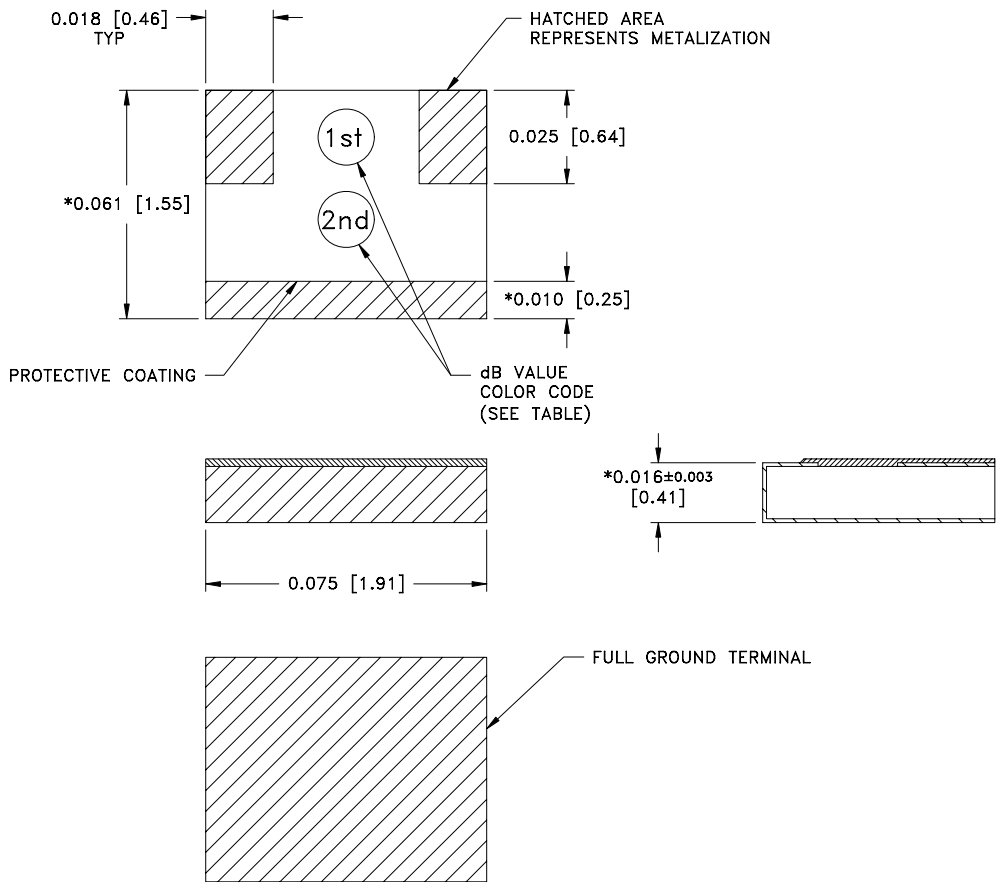
- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
 - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DWG REQUIREMENTS.
- 3.2 PERFORM INSPECTION IN ACCORDANCE WITH QA0006 AND FORM0357 FOR COMMERCIAL GRADE PRODUCT.
- 3.3 TEST DATA REQUIREMENTS:
 - 3.3.1 NO TEST DATA REQUIRED FOR CUSTOMER.
 - 3.3.2 DATA RETENTION – 24 MONTHS.

4.0 PACKAGING: STANDARD PACK PER MC0023.

EMC TECHNOLOGY 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1007585000
	CHANGE NOTICE	EN 07-E0905	REV LVL	F
			SHEET	1 OF 2

PART ID REF

TS05XXW1S



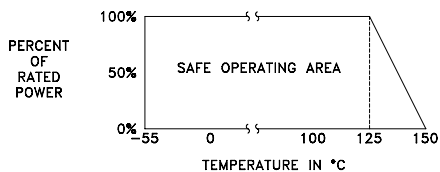
MECHANICAL SPECIFICATIONS:

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

* DIMENSIONS APPLY BEFORE SOLDER. ALLOW
 0.015 MAX FOR ALL PRETINNED SURFACES.

METRIC EQUIVALENTS GIVEN IN [mm]
 FOR REFERENCE INFORMATION ONLY

POWER RATING AND DERATING



REFERENCE TABLE

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



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	SCALE	DRAWN BY	CHECKED BY	APPROVED BY
24602	32:1	JG 9/11/07		DAR 9/11/07
REV	CHANGE NOTICE	DRAWING NO	SHEET	
F	EN 07-E0905	1007585000	2 OF 2	