TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: TS05XXW3S

(XX) DB VALUE

DESCRIPTION: CHIP ATTENUATOR

ASSEMBLY DWG: 1900544

1.0 SPECIFICATIONS:

- 1.1 ELECTRICAL:
 - 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
 - 1.1.2 FREQUENCY RANGE: DC-12.4 GHZ.
 - 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 4 - 8 GHZ - 1.35 MAX
- 8 12.4 GHZ 1.50 MAX
- 4 8 GHZ 1.35 MAX 1.1.6 INPUT POWER: 100 MILLIWATT
 - 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 $+150^{\circ}$ 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 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 824W170 AND 824F036 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 755W002.

EMC TECHNOLOGY	CAGE CODE # 24602		DWG#	1007465000			
8851 SW OLD KANSAS AVE.	CHANGE NOTICE	EN 09-E0971	REV LVL	М			
STUART, FL 34997			SHEET	1	OF	2	

PART ID REF TS0500W3S *0.019 PROTECTIVE COATING [0.48]TOP ONLY 0.025 [0.64] *0.061 [1.55] *0.010 [0.25] 0.005 [0.13] TYP REF *0.016±0.003 [0.41] - *****0.077 [1.96] -(0.030 [0.76]) TYP - 0.075 [1.91] -*0.015 [0.38] HATCHED AREA REPRESENTS METALIZATION 0.025 [0.64] UNITS MARKED ON THIS SURFACE *0.021 [0.53] TYP * DIMENSIONS APPLY BEFORE SOLDER. ALLOW METRIC EQUIVALENTS GIVEN IN [mm] FOR REFERENCE INFORMATION ONLY 0.015 MAX FOR ALL PRETINNED SURFACES. **POWER RATING AND DERATING** MECHANICAL SPECIFICATIONS: 100% SUBSTRATE:
MATERIAL - ALUMINA 96%, MIL-I-10. PERCENT OF RATED POWER TERMINAL: SAFE OPERATING AREA 50% MATERIAL - THICK FILM, NICKEL BARRIER, SOLDER COATED. RESISTIVE ELEMENT: 100 MATERIAL - THIN FILM, TANTALUM NITRIDE. TEMPERATURE IN °C 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. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAGE CODE SCALE CHECKED BY APPROVED BY DRAWN BY **TOLERANCES** Technology 24602 32:1 CRH 09/21/09 DAR 4/11/02 FRACT ANG CHANGE NOTICE DRAWING NO REV SHEET XXX ±0.005 PHONE NO. (772)286-9300 FAX NO. (772)283-5286 EN 09-E0971 1007465000 2 OF 2 XXXX