

**TITLE: SPECIFICATION CONTROL DRAWING**

**PART IDENTIFIER:** TS05XXF  
(XX) DB VALUE

**DESCRIPTION:** CHIP ATTENUATOR , RoHS COMPLIANT

**ASSEMBLY DWG:** 1901874

**1.0 SPECIFICATIONS:**

- 1.1 ELECTRICAL:
  - 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
  - 1.1.2 FREQUENCY RANGE: DC-18 GHZ.
  - 1.1.3 ATTENUATION VALUES AVAILABLE: 0-20 DB IN 1 DB INCREMENTS.
  - 1.1.4 ATTENUATION ACCURACY: SEE TABLE.

ATTENUATION ACCURACY				
DB	DC - 4 GHZ	4 - 8 GHZ	8 - 12.4 GHZ	12.4 - 18 GHZ
0	-0,+3	-0,+5	-0,+5	-0,+5
1 -3	±0.3	±0.5	±0.5	±0.5
4 - 6	±0.4	±0.5	±0.5	±0.75
7 - 10	±0.5	±0.5	±0.75	±1.0
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 - 18 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 WATT 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 WITH DB VALUE. LEGIBILITY AND PERMANENCY PER MIL-STD-130.

**3.0 QUALITY ASSURANCE:**

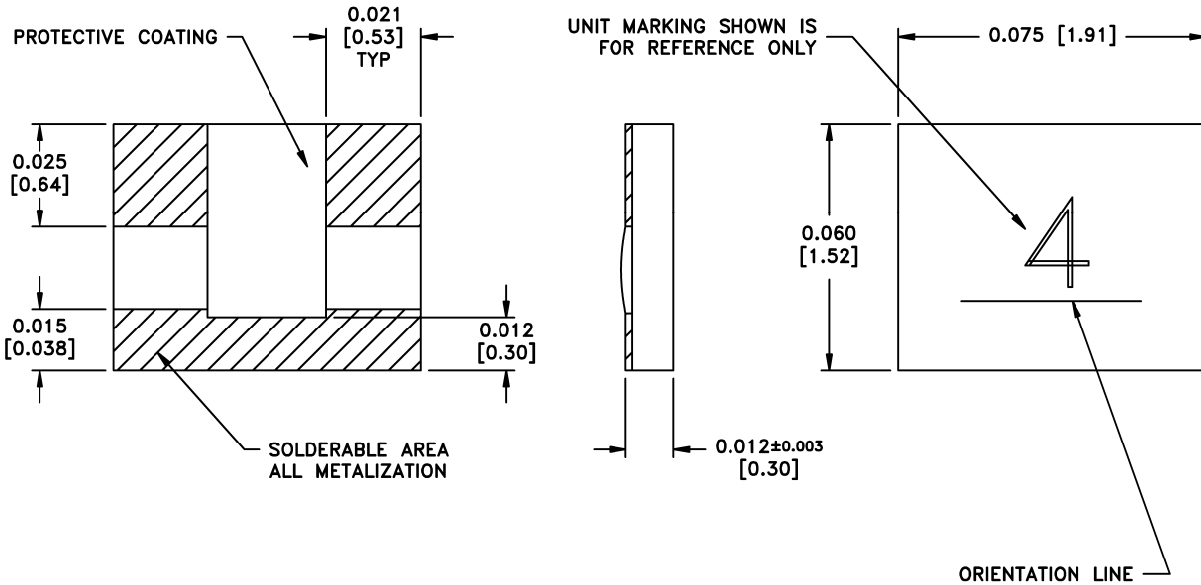
- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
  - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DWG REQUIREMENTS.
- 3.2 PERFORM INSPECTION IN ACCORDANCE WITH 824W170 AND 824F036 FOR COMMERCIAL GRADE PRODUCT.
- 3.3 TEST DATA REQUIREMENTS:
  - 3.3.1 NO TEST DATA REQUIRED FOR CUSTOMER.
  - 3.3.2 DATA RETENTION – 24 MONTHS.

**4.0 PACKAGING:** STANDARD PACK PER 755W002.

EMC TECHNOLOGY 8851 SW OLD KANSAS AVE. STUART, FL 34997	<b>CAGE CODE # 24602</b>		<b>DWG #</b>	1011125000
	<b>CHANGE NOTICE</b>	EN 10-E0351	<b>REV LVL</b>	B
			<b>SHEET</b>	1 OF 2

PART ID REF

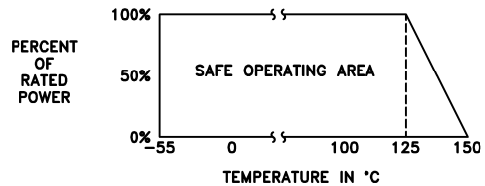
TS05XXF



**MECHANICAL SPECIFICATIONS:**

**SUBSTRATE:**  
 MATERIAL - ALUMINA, MIL-I-10.  
**TERMINAL:**  
 MATERIAL - LEAD FREE PLATING,  
 RoHS COMPLIANT.  
**RESISTIVE ELEMENT:**  
 MATERIAL - THIN FILM, TANTALUM NITRIDE.

**POWER RATING AND DERATING**



METRIC EQUIVALENTS GIVEN IN [mm]  
 FOR REFERENCE INFORMATION ONLY



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 3/10/10		
REV	CHANGE NOTICE	DRAWING NO	SHEET	
B	EN 10-E0351	1011125000	2 OF 2	