

**TITLE: SPECIFICATION CONTROL DRAWING**

**PART IDENTIFIER:** TS03XXW3S  
(XX) DB VALUE

**DESCRIPTION:** CHIP ATTENUATOR

**ASSEMBLY DWG:** 1900334

**1.0 SPECIFICATIONS:**

- 1.1 ELECTRICAL:
  - 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
  - 1.1.2 FREQUENCY RANGE: DC-8 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
0	-0,+0.3	-0,+0.5
1 -3	±0.3	±0.5
4 - 6	±0.4	±0.5
7 - 10	±0.5	±0.5
11 - 15	±0.75	+0.5,-3.0
16 - 20	±1.0	+0.5,-4.0

- 1.1.5 VSWR: DC - 4 GHZ - 1.25.  
4 - 8 GHZ - 1.35.
- 1.1.6 INPUT POWER: 2 WATTS 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, 50 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.
- 1.4 ELECTROSTATIC DISCHARGE CONTROL: PER MIL-STD-1686.

**2.0 UNIT MARKING:** "DB VALUE". LEGIBILITY AND PERMANENCY PER MIL-STD-130.

**3.0 QUALITY ASSURANCE:**

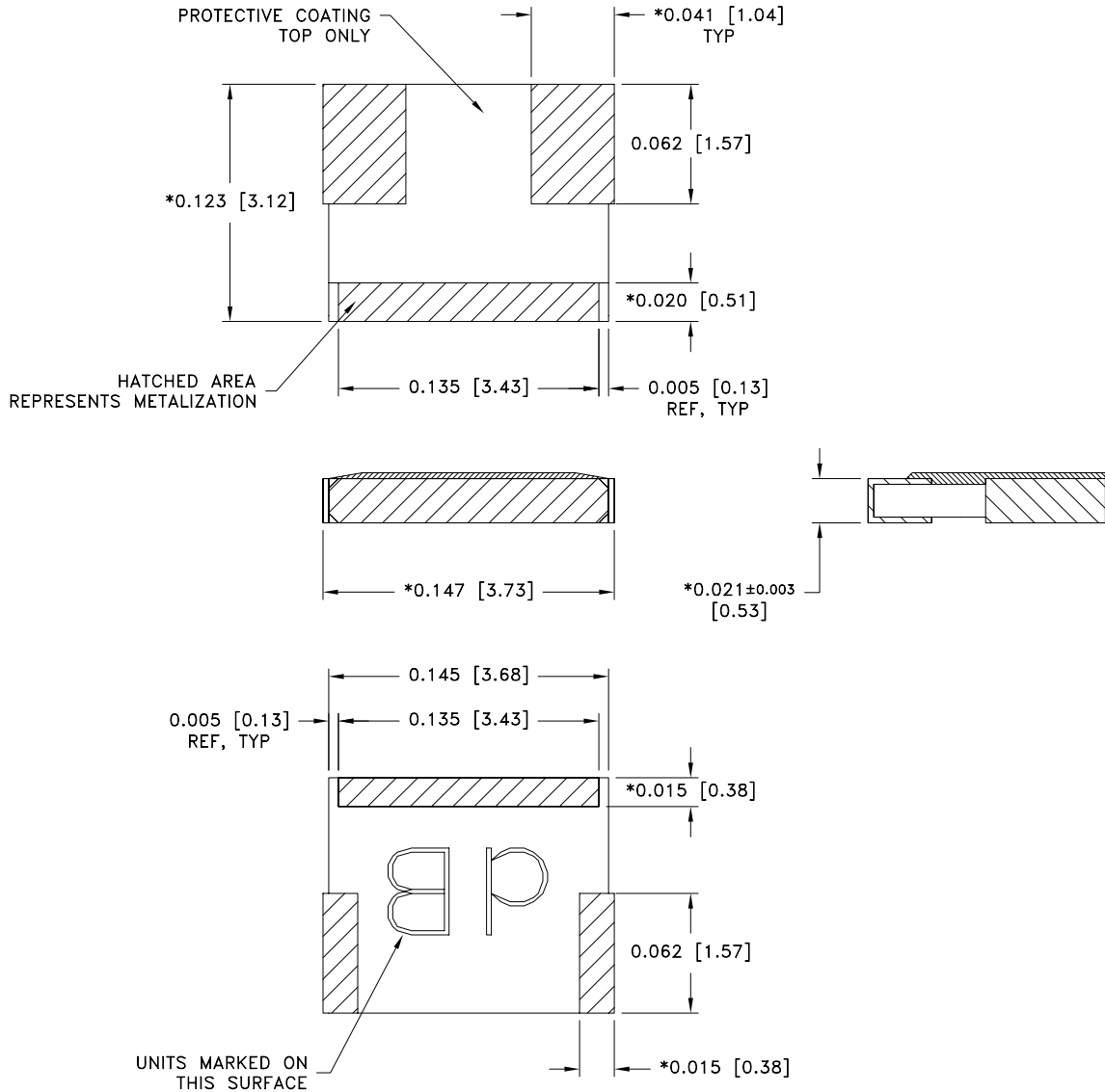
- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
  - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DWG REQUIREMENTS.
- 3.2 PERFORM INSPECTION IN ACCORDANCE WITH 824W170 AND 824F036 FOR COMMERCIAL GRADE PRODUCT.
- 3.3 TEST DATA REQUIREMENTS:
  - 3.3.1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

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

<b>EMC TECHNOLOGY</b> <b>8851 SW OLD KANSAS AVE</b> <b>STUART, FLORIDA 34997</b>	<b>CAGE CODE # 24602</b>		<b>DWG #</b>	1005675000
	<b>CHANGE NOTICE</b>	EN 10-0911	<b>REV LVL</b>	L
			<b>SHEET</b>	1 OF 2

PART ID REF

TS03XXW3S



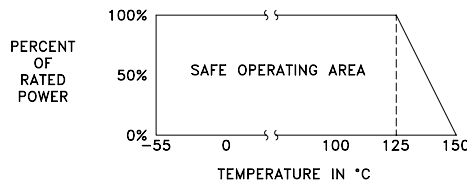
**MECHANICAL SPECIFICATIONS:**

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

METRIC EQUIVALENTS GIVEN IN [mm]  
 FOR REFERENCE INFORMATION ONLY

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

**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 --- --

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CAGE CODE <b>24602</b>	SCALE <b>16:1</b>	DRAWN BY <b>DAR</b>	CHECKED BY	APPROVED BY <b>DAR</b>
REV <b>L</b>	CHANGE NOTICE <b>EN 10-0911</b>	DRAWING NO <b>1005675000</b>	SHEET <b>2 OF 2</b>	