

**TITLE: SPECIFICATION CONTROL DRAWING**  
**SMITHS INTERCONNECT PROPRIETARY**

REVISIONS RECORD			
REV	SHEET	DATE	DESCRIPTION

[illegible]

<b>SMITHS INTERCONNECT</b> <b>8851 SW OLD KANSAS AVE.</b> <b>STUART, FL 34997</b>	<b>CAGE CODE # 24602</b>	<b>DWG#</b> 1010805000	<b>SHEET</b>	REF
			<b>REV LEVEL</b>	A

# TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: TT5XXXW3

X = (0) — 0 DB AND (5) = .5 DB  
XX = WHOLE DB VALUE (00 THRU 20)

DESCRIPTION: CHIP ATTENUATOR

ASSEMBLY DWG: 1901714

## 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 .5 DB 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
.5-3.5	±0.3	±0.5	±0.5
4-6.5	±0.4	±0.5	±0.5
7-10.5	±0.5	±0.5	±0.75
11-15.5	±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 WITH DB VALUE  
LEGIBILITY AND PERMANENCY PER MIL-STD-130.

## 3.0 QUALITY ASSURANCE:

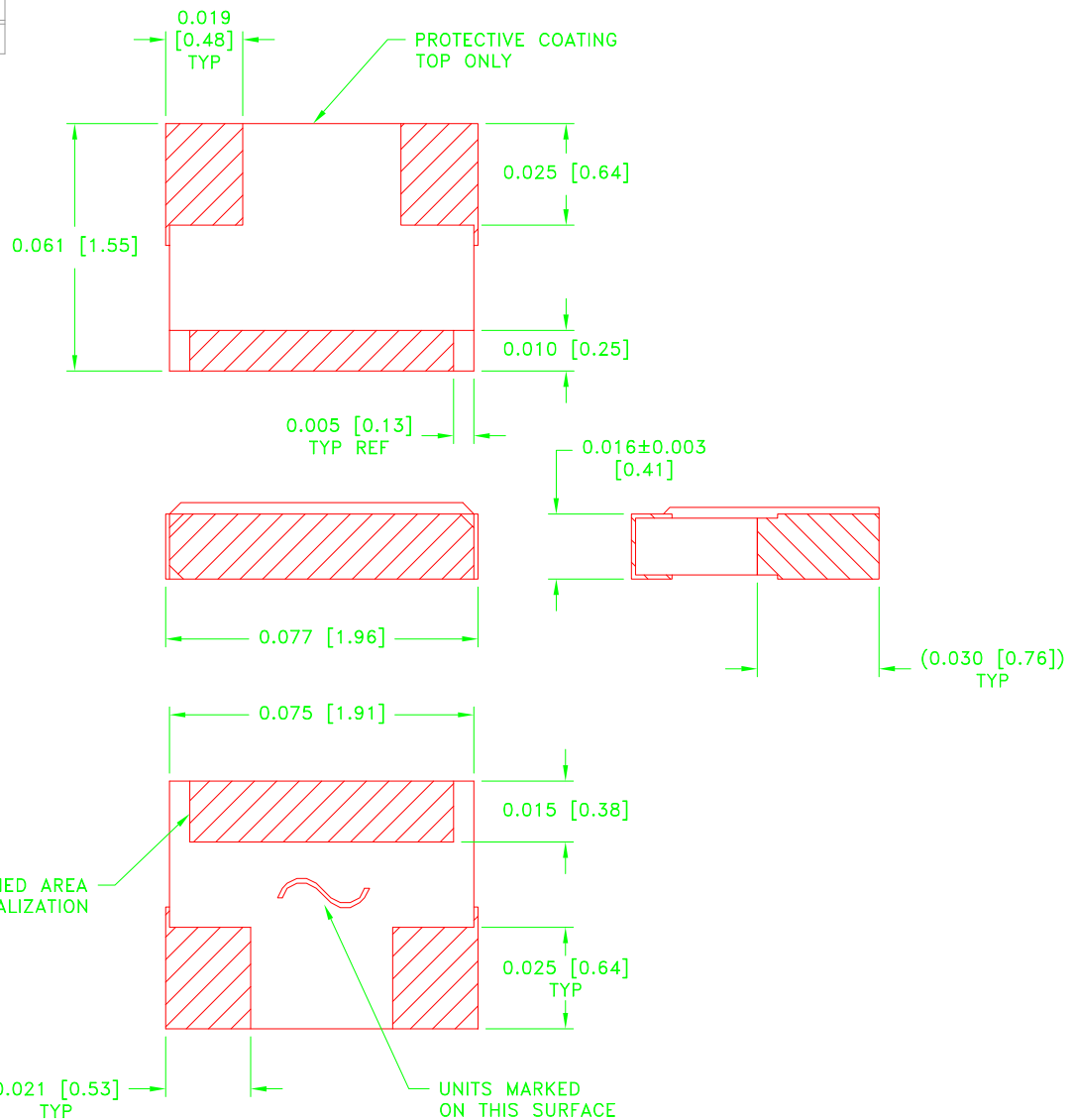
- 3.1 SAMPLE INSPECT PER ANSI/ASQC Z1.4 GENERAL INSPECTION, LEVEL II, AQL = 1.0.
  - 3.1.1 VISUAL AND MECHANICAL EXAMINATION FOR CONFORMANCE TO OUTLINE DWG REQUIREMENTS.
- 3.2 PERFORM INSPECTION IN ACCORDANCE WITH 824W170 AND 824F036 FOR COMMERCIAL GRADE PRODUCT.
- 3.3 TEST DATA REQUIREMENTS:
  - 3.3.1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

4.0 PACKAGING: STANDARD PACK PER 755W002.

SMITHS INTERCONNECT 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1010805000
	CHANGE NOTICE	EN 09-E0971	REV LVL	A
			SHEET	1 OF 2

PART ID REF

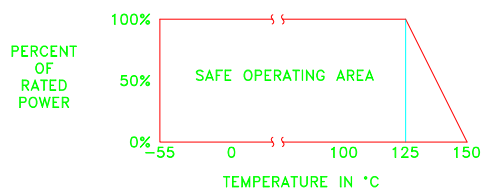
TT5XXXW3

**MECHANICAL SPECIFICATIONS:****SUBSTRATE:**

MATERIAL - ALUMINA 96%, MIL-I-10.

**TERMINAL:**MATERIAL - THICK FILM, NICKEL BARRIER,  
SOLDER PLATED.**RESISTIVE ELEMENT:**

MATERIAL - THIN FILM, TANTALUM NITRIDE.

METRIC EQUIVALENTS GIVEN IN [mm]  
FOR REFERENCE INFORMATION ONLY**POWER RATING AND DERATING**8851 SW OLD KANSAS AVE  
STUART, FL 34997  
PHONE NO. (772)286-9300  
FAX NO. (772)283-5286UNLESS OTHERWISE  
SPECIFIED DIMENSIONS  
ARE IN INCHES**TOLERANCES**FRACT -- --  
ANG -- --  
XX -- --  
XXX ±0.005  
XXXX -- --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.

CAGE CODE

24602

SCALE

32:1

DRAWN BY

JG 1/31/05

CHECKED BY

APPROVED BY

DAR 1/31/05

REV

A

CHANGE NOTICE

EN 09-E0971

DRAWING NO

1010805000

SHEET

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