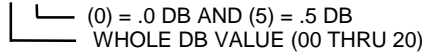


TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: TT5XXXS



DESCRIPTION: CHIP ATTENUATOR

ASSEMBLY DWG: 1900854

1.0 SPECIFICATIONS

1.1 ELECTRICAL

- 1.1.1 IMPEDANCE: 50 OHMS NOMINAL.
- 1.1.2 FREQUENCY RANGE: DC-18GHZ
- 1.1.3 ATTENUATION VALUES AVAILABLE: 0-20DB IN 0.5DB 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: 1.30 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 NOT APPLICABLE.

2.0 UNIT MARKING: MARKED WITH COLOR DOT(S), VIOLET BACKGROUND ADD 0.5DB. LEGIBILITY AND PERMANENCY PER MIL-STD-130.

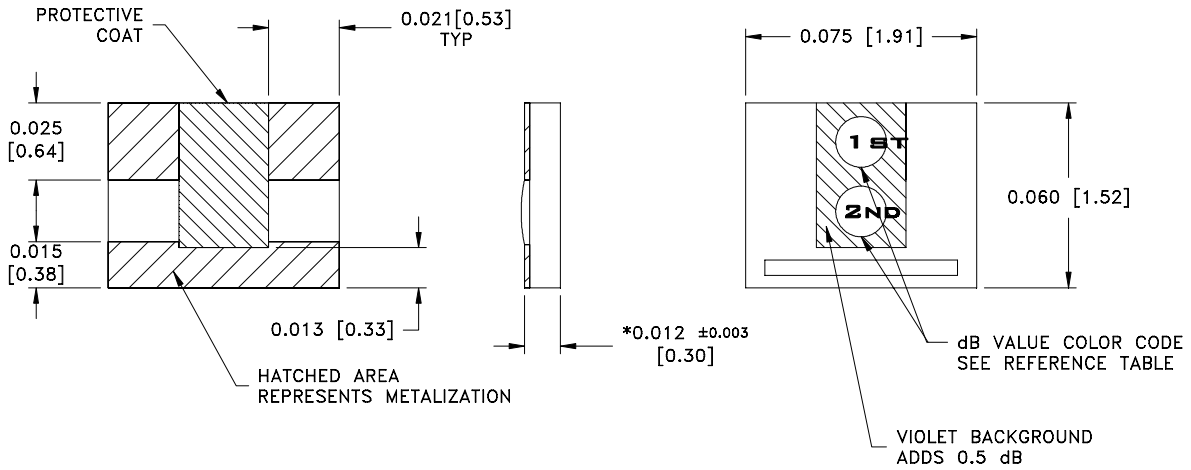
3.0 QUALITY ASSURANCE:

- 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 DRAWING REQUIREMENTS.
 - 3.1.2 MEASURE AND RECORD DCA AND IMPEDANCE.
 - 3.1.3 ACCEPTANCE LIMITS:
 - 3.1.3.1 IMPEDANCE: 50_ ±5%.
 - 3.1.3.2 ATTENUATION: SEE ELECTRICAL 1.1.4.
- 3.2 TEST DATA REQUIREMENTS:
 - 3.2.1 NO TEST DATA REQUIRED FOR CUSTOMER.
 - 3.2.2 DATA RETENTION – 24 MONTHS

4.0 PACKAGING: STANDARD PACKING PER MC0023.

ENG	PUR	MFG	PLAN	SM	
CC		QA			
EMC TECHNOLOGY, INC 1971 OLD CUTHBERT ROAD CHERRY HILL, NJ 08034	CAGE CODE # 24602			DWG #	1007775000
	CHANGE NOTICE	EN 01-182		REV LVL	D
				SHEET	1 OF 2

PART ID REF
TT5XXXS



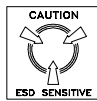
MECHANICAL SPECIFICATIONS:

SUBSTRATE:
 MATERIAL - ALUMINA 96%, MIL-I-10.
TERMINAL:
 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.

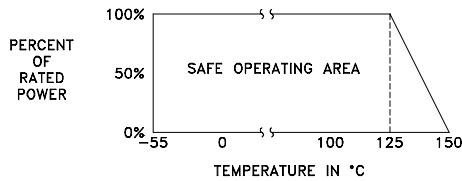
dB		DOT COLOR		dB		DOT COLOR	
VAL	1st	2nd	VAL	1st	2nd		
0	BLK	---	11	BRN	BRN		
1	BRN	---	12	BRN	RED		
2	RED	---	13	BRN	ORG		
3	ORG	---	14	BRN	YEL		
4	YEL	---	15	BRN	GRN		
5	GRN	---	16	BRN	BLU		
6	BLU	---	17	BRN	VIO		
7	VIO	---	18	BRN	GRY		
8	GRY	---	19	BRN	WHT		
9	WHT	---	20	RED	BLK		
10	BRN	BLK					

NOTE: VIOLET PROTECTIVE COATING REPRESENTS HALF dB VALUES.



METRIC EQUIVALENTS GIVEN IN [mm] FOR REFERENCE INFORMATION ONLY

POWER RATING AND DERATING



EMC TECHNOLOGY INC
 1971 OLD CUTHBERT RD
 CHERRY HILL NJ 08034
 PHONE NO. (856) 429-7800
 FAX NO. (856) 429-1807

UNLESS 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 1:1	DRAWN BY CME 05/17/2001	CHECKED BY	APPROVED BY DAR 5/18/01
REV D	CHANGE NOTICE EN 01-182	DRAWING NO 1007775000	SHEET 2 OF 2	