

TITLE: SPECIFICATION CONTROL DRAWING
SMITHS INTERCONNECT PROPRIETARY

REVISIONS RECORD			
REV	SHEET	DATE	DESCRIPTION

A	1 - 2	06/13/96	ECN 95-043, MARKING.
B	1-2	12/07/98	EN 98-431, UPDATE ELECTRICAL AND QA SPEC. ADD BULK TO 4.0.
C	1 – 2	04/20/99	EN 99-148, UPDATE NOTES AND MARKINGS ON PAGE 2
D	1-2	05/16/01	EN 01-182, CHANGE .5 DB CALL OUT TO 0 DB IN 1.1.3. GENERAL UPDATE OF INFORMATION.
D	1-2	10/8/04	EN 04-E231, REMOVE SIGNATURE BLOCK, NO REV CHANGE
E	1-2	11/11/09	EN 09-E1249, UPDATE FOR LASER MARKS AND SPECS.
F	1-2	3/10/10	EN 10-E0351, UPDATE SHEET 2

[illegible]

SMITHS INTERCONNECT 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602	DWG# 1007775000	SHEET	REF
			REV LEVEL	F

TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: TT5XXXX

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

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.

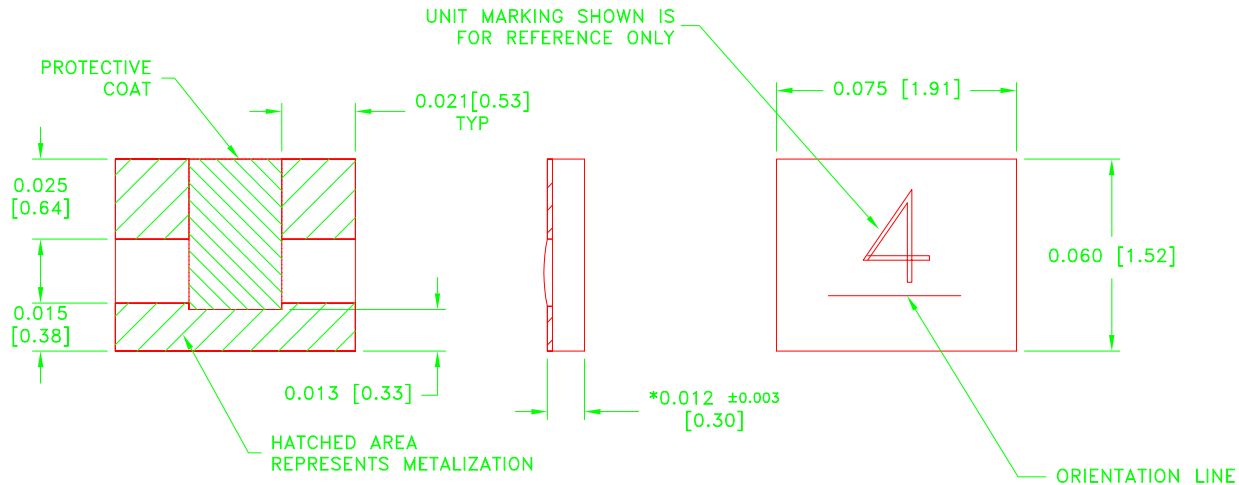
2.0 UNIT MARKING: MARKED WITH DB VALUE.
LEGIBILITY AND PERMANENCY PER MIL-STD-130.

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 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 755W002.

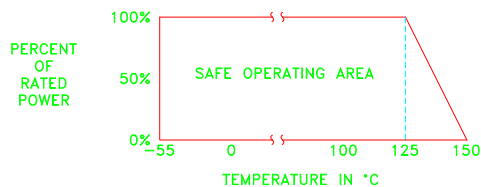
SMITHS INTERCONNECT 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1007775000
	CHANGE NOTICE	EN 10-E0351	REV LVL	F
			SHEET	1 OF 2

**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.

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) 283-5286

UNLESS OTHERWISE
SPECIFIED DIMENSIONS
ARE IN INCHES

TOLERANCES

FRACT -- --
ANG -- --
XX -- --
XXX ±0.005
XXXX -- --

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OR USED AS BASIS FOR THE MANUFACTURE OR SALE OF PARTS OR DEVICES WITHOUT PERMISSION.

CAGE CODE

24602

SCALE

1:1

DRAWN BY

JG 3/10/10

CHECKED BY

APPROVED BY

REV

F

CHANGE NOTICE

EN 10-E0351

DRAWING NO

1007775000

SHEET

2 OF 2