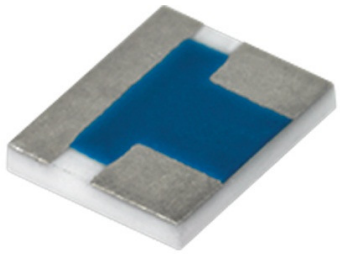
ATTENUATOR
CHIP 1 WATT

FEATURES

- Small Footprint
- High Power
- Surface Mount
- Low VSWR
- Easy Installation
- Wide Attenuation Offering

APPLICATIONS

- Mobile Networks
- Broadcast
- High Power Amplifiers
- Isolators/Circulators
- Military
- Instrumentation



GENERAL DESCRIPTION

EMC Technology offers the widest selection of chip attenuators worldwide. Chip components are offered in Alumina, Aluminum Nitride, Beryllium Oxide, and CVD diamond for maximum performance.

ORDERING INFORMATION

Part Identifier: TS05XXS

(XX) – dB Value

SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance: 50 ohms

Frequency Range: DC – 18 GHz

Attenuation Values Available: 0 – 20 in 1 dB increments

Attenuation Accuracy:

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	---

Input Power CW: 100 Milliwatts CW full rated power to 125°c, derated linearly to 0 watts at 150°c.

Peak Power: 1 watt for 10us pulse width @ 1% duty cycle.

VSWR: DC – 4 GHz - 1.25 Max

4 – 8 GHz - 1.35 Max

8 – 18 GHz - 1.50 Max

2.0 ENVIRONMENTAL

Operating Temperature: -55˚C to +150˚C

Non-operating Temperature: -65˚C to +150˚C

Altitude Non-Operating: Sea level to 50,000 feet.

Altitude Operating: Sea level to 50,000 feet.

Vibration: Per MIL-STD-202, METHOD 204, COND. D.

Shock: Per MIL-STD-202, METHOD 213, COND. I.

Moisture Resistance: Per MIL-STD-202, METHOD 106 except subcycle steps 7a and 7b and polarization and load are not applicable.

3.0 MARKING

Unit Marking: Marked with dB value. Legibility and permanency PER MIL-STD-130

4.0 QUALITY ASSURANCE

Sample inspect per ansi/asqc z1.4 general inspection, level II, aql = 1.0.

Visual and mechanical examination for conformance to outline dwg requirements.

Perform inspection in accordance with 824W170 and 824F036 for commercial grade product.

Test data requirements:

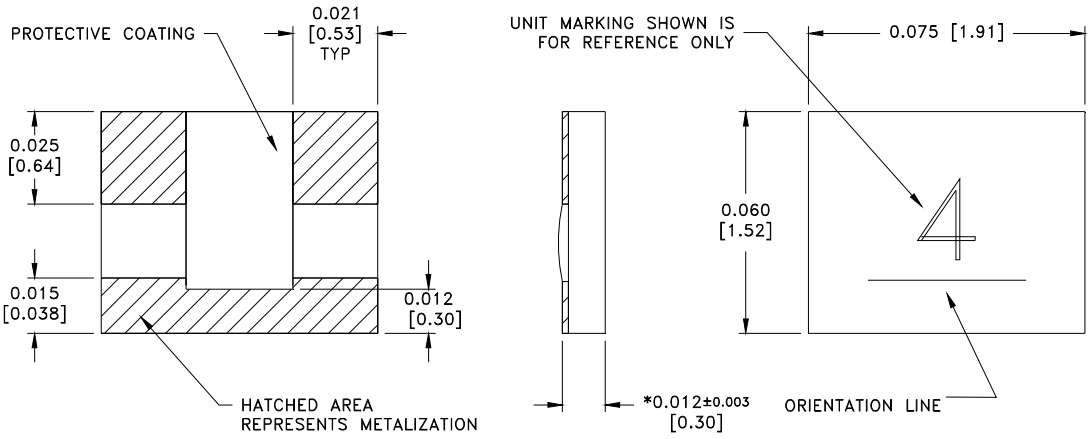
No test data required for customer.

Data retention – 24 months packaging

Standard Packaging: Tape and Reel

5.0 MECHANICAL

Resistive Film:	Thin Film, Tantalum Nitride
Terminal Material:	Thick Film, Nickel Barrier, Solder Coated
Metric Dimensions:	Provided for reference only
Workmanship	PER MIL-PRF-55342



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

6.0 SUGGESTED MOUNTING FOOTPRINT

	Inches						mm					
Part Number	A	B	C	D	S	W	A	B	C	D	S	W
TS05XXS	0.025	0.027	0.030	0.015	0.019	0.080	0.64	0.69	0.76	0.38	0.48	2.03