

# ATTENUATOR CHIP

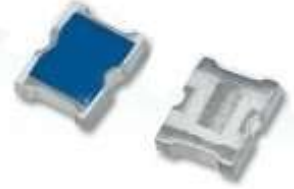


## FEATURES

- 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: TS09XXSMTF**  
(XX) – dB Value

## SPECIFICATIONS

### 1.0 ELECTRICAL

Nominal Impedance: 50 ohms  
Frequency Range: DC – 20 GHz  
Attenuation Values Available: 1 – 10 in 1 dB increments  
Attenuation Accuracy:

ATTENUATION ACCURACY @25°C		
dB	DC – 15 GHz	15-20 GHz
0 – 4	±0.5	±0.5
5 – 10	±0.5	±0.75

VSWR @ 25°C: DC – 20 GHz - 1.40:1 Typical  
DC – 20 GHz - 1.70:1 Max

Input Power CW:

Input Power CW	
Attenuation ( dB )	Power ( W )
0 - 1	4.00
2 - 3	1.50
4 - 6	1.25
7 - 10	1.00
Full Rated Power at 100 C. Power is derated linearly to 0 Watts at 150 C	



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## 2.0 ENVIRONMENTAL

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

## 3.0 MARKING

Unit Marking: None

## 4.0 QUALITY ASSURANCE

**Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL<sub>2</sub>**

Visual and Mechanical Inspection for Conformance to Outline Drawing

Measure Attenuation and VSWR

Data Retention - Standard

## 5.0 PACKAGING

Standard Packaging: Tape and Reel

## 6.0 MECHANICAL

Substrate Material: Alumina 96%, MIL-I-10

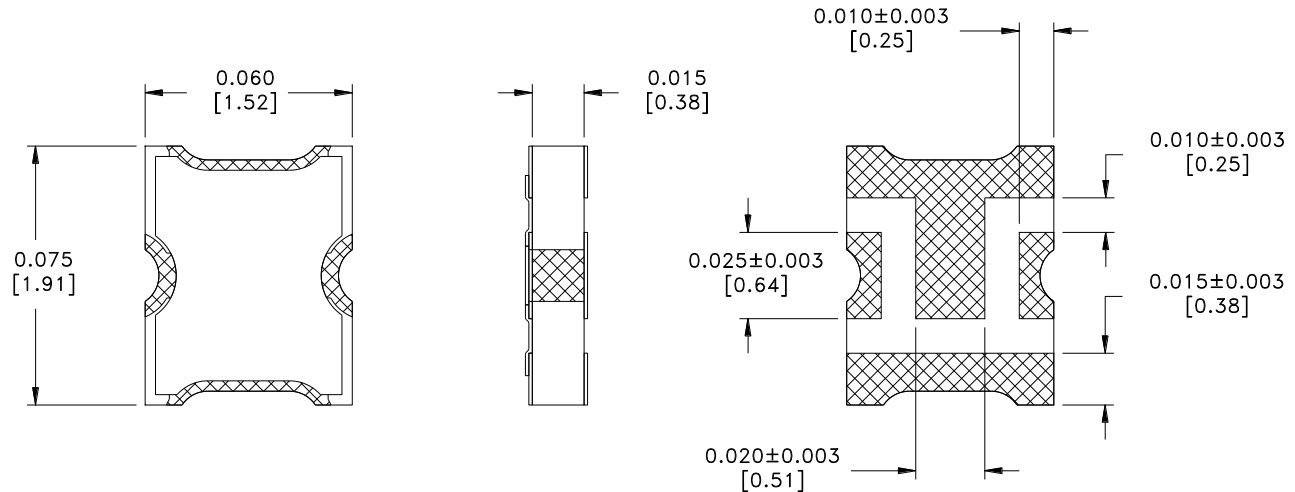
Resistive Film: Thick Film

Terminal Material: Thick Film, Lead Free Plating

Metric Dimensions: Provided for reference only

Workmanship PER MIL-R-55342

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Unless Otherwise Specified: TOLERANCE: X.XXX =  $\pm 0.005$

## 7.0 SUGGESTED MOUNTING FOOTPRINT

Part Number	Inches						mm					
	A	B	C	D	E	W	A	B	C	D	E	W
TS09XXSMTF	0.025	0.015	0.016	0.049	0.018	0.070	0.64	0.38	0.41	1.24	0.46	1.78

