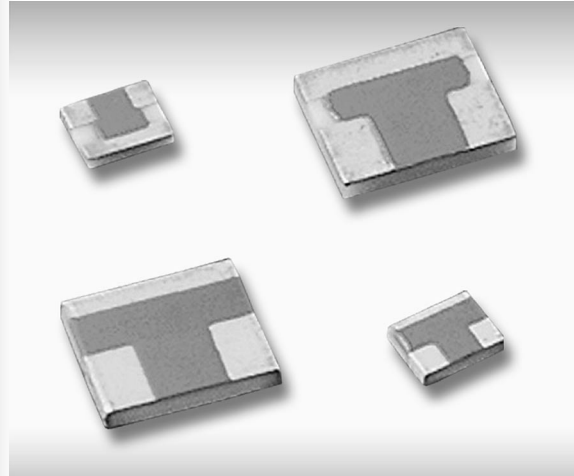


**Features**

- Substrate - Alumina
- Power Rating - 0.1 to 2 Watts
- Frequency Range DC to 18 GHz
- Tape and Reel Packaging Available
- VSWR under 1.50:1
- Variety of Chip Sizes
- Attenuation Values from 1 to 20 dB in 1 dB increments; consult the factory for fractional and higher attenuation values.
- S-Parameter Files Available
- Surface Mount and Lead Attachment Versions Available

**Applications**

- Circulators
- Coaxial Attenuator Components
- Filters
- High Power Amplifiers
- Instrumentation
- Isolators
- Military
- Signal Sampling
- Interstage Isolation
- Impedance Matching



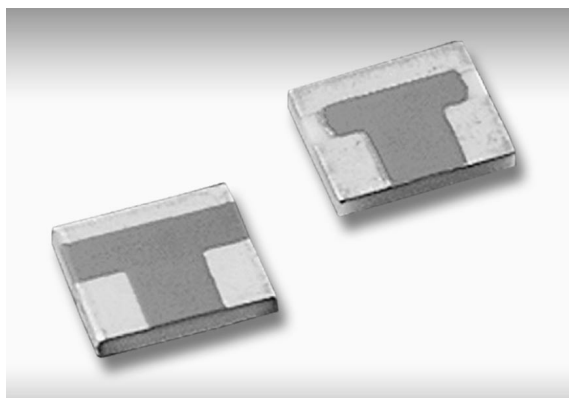
EMC Technology's attenuators are available in a low power chip package. The power ratings range from 0.1 to 2 watts. The attenuation values range from 1 dB to 20 dB. The terminals of EMC chip attenuators are made with thick film base material that is nickel plated and solder coated. The resistive element is thin film offering superior electrical performance. The TS04 series uses thick film resistor elements. The devices are available for shipping in tray or tape and reel packaging.

**Quick Selector Chart**

Series	Frequency Range (GHz)	Dimensions (Inches)
TS03	DC-12.4	.145 x .122
TS04	DC-2.5	.100 x .125
TS05	DC-18	.075 x .060

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EMC Technology's TS03 chip attenuators offer power dissipation up to 2 watts and are designed to work from DC to 12.4 GHz. High reliability and tight tolerance options are available.

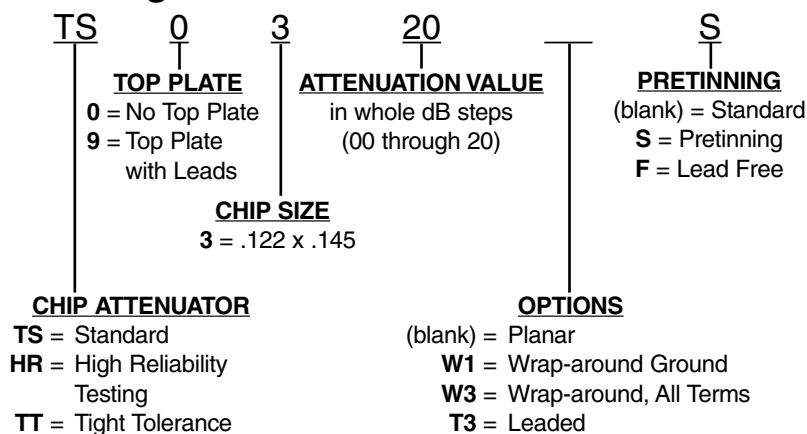
## General Specifications

Impedance ..... 50 Ohms Nominal  
 Attenuation Stability ..... 0.0001 dB/dB/C°  
 VSWR (Max) ..... 1.25 @ DC-4 GHz  
   1.35 @ 4-8 GHz  
   1.50 @ 8-12.4 GHz  
 Power Rating ..... 2.0 Watts  
 Power Derating ..... 100% @ 125° C  
   Derates to 0% @ 150° C  
 Operating Temperature ..... -55° C to 150° C

## Material Specifications

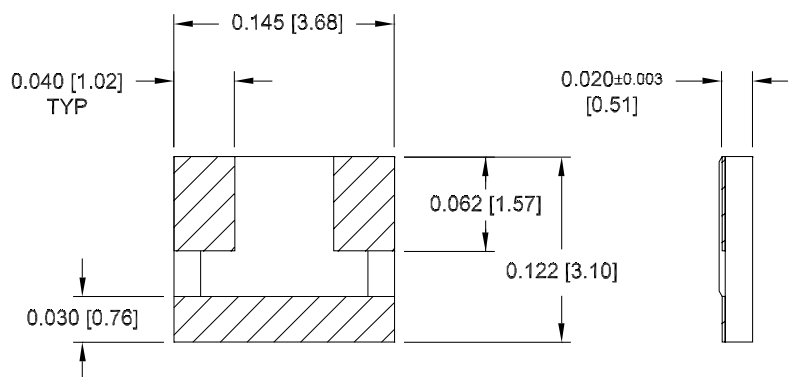
Substrate ..... Alumina  
 Resistive Element ..... Thin Film  
 Termination Material . . . Thick Film, Nickel Barrier  
   with Solder Plated Finish

## Ordering Information



Note: Contact factory for details regarding precision tight tolerance (TT) attenuators.

## Dimensions (TS03XX Series)



## TS03 Style

