

# ATTENUATOR CHIP 10 WATT



DATA SHEET

PART SERIES: 83-7044-XX.00

SHEET 1 OF 2  
Dwg 83-7044

EN 14-0893  
Revision -

## FEATURES

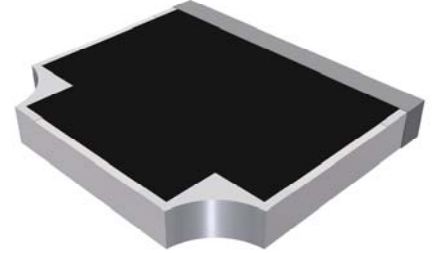
- Small Footprint
- High Power
- Surface Mount
- Low VSWR
- Easy Installation
- Wide Attenuation Offering

## 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:

83-7044-XX.00

Attenuation Value

## SPECIFICATIONS

### 1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC - 6.0 GHz
Attenuation Values Available:	See Table 1
Attenuation Accuracy:	See Table 1
Input Power CW:	10 watts @ 100 °C, derated linearly to zero power at 150 °C
Peak Power:	100 watts (based on 10us pulse width and 1% duty cycle)
VSWR:	See Table 1

TABLE 1

Attenuation Value	Frequency	Attenuation Accuracy	VSWR
1 – 10 dB	DC – 2.0 GHz	±0.4 dB	1.15:1 Max
	2.0 – 4.0 GHz	±0.7 dB	1.25:1 Max
	4.0 – 6.0 GHz	±0.9 dB	1.40:1 Max
15 and 20 dB	DC – 3.0 GHz	±0.5 dB	1.25:1 Max
	3.0 – 6.0 GHz	±1.0 dB	1.50:1 Max

### 2.0 ENVIRONMENTAL

Operating Temperature:	-55°C to +150°C
Non-operating Temperature:	-65°C to +150°C
Temperature Coefficient:	+/-200 PPM / °C max

### 3.0 MARKING

Unit Marking:	None
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## 4.0 QUALITY ASSURANCE

Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL.

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:

Aluminum Nitride

Resistive Film:

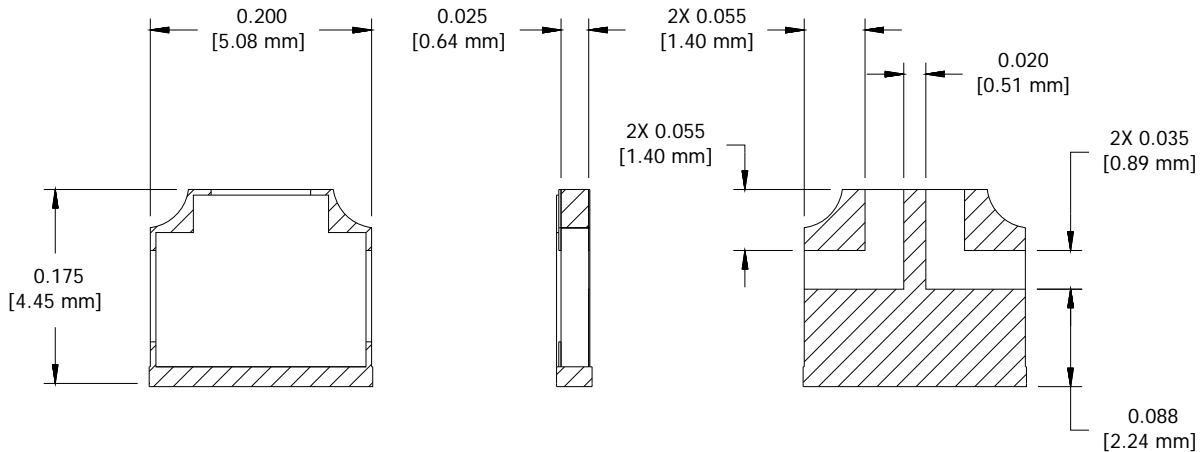
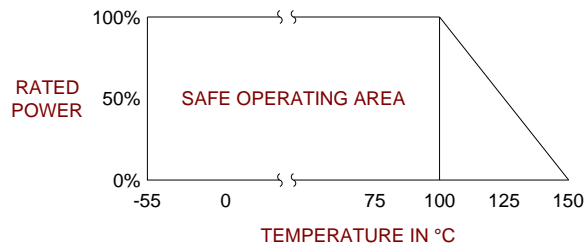
Thick Film

Terminal Material:

Thick Film, Tin-Lead Plated

Metric Dimensions:

Provided for reference only



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.02 X.XXX = ± 0.010