

# HIGH POWER ATTENUATOR CHIP 20 WATT



DATA SHEET

PART SERIES: HPCA54XX.00W3

SHEET 1 OF 3  
Dwg 1009125

EN 16-0840  
Revision F

## 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: HPCA54XX.00W3**  
(XX) – dB Value

## SPECIFICATIONS

### 1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC – 2.5 GHz
Attenuation Values Available:	1 – 10 and 20 in 1 dB increments
Attenuation Accuracy:	0 dB -0.0 / + 0.25 dB 1 – 10 dB $\pm 0.5$ dB 20 dB $\pm 1.0$ dB
Input Power CW:	20 Watts full rated power to 125°C, derated linearly to 0 watts at 150°C.
Peak Power:	50 watts for 10us pulse width @ 1% duty cycle.
VSWR:	DC – 1 GHz - 1.15:1 1.1 – 2.5 GHz - 1.35:1

### 2.0 ENVIRONMENTAL

Operating Temperature:	-55°C to +150°C
Non-operating Temperature:	-65°C to +150°C

### 3.0 MARKING

Unit Marking:	"dB Value"
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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

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## 5.0 PACKAGING

Standard Packaging:

Tape and Reel

## 6.0 MECHANICAL

Substrate:

Beryllia

Resistive Film:

Thick Film

Terminal Material:

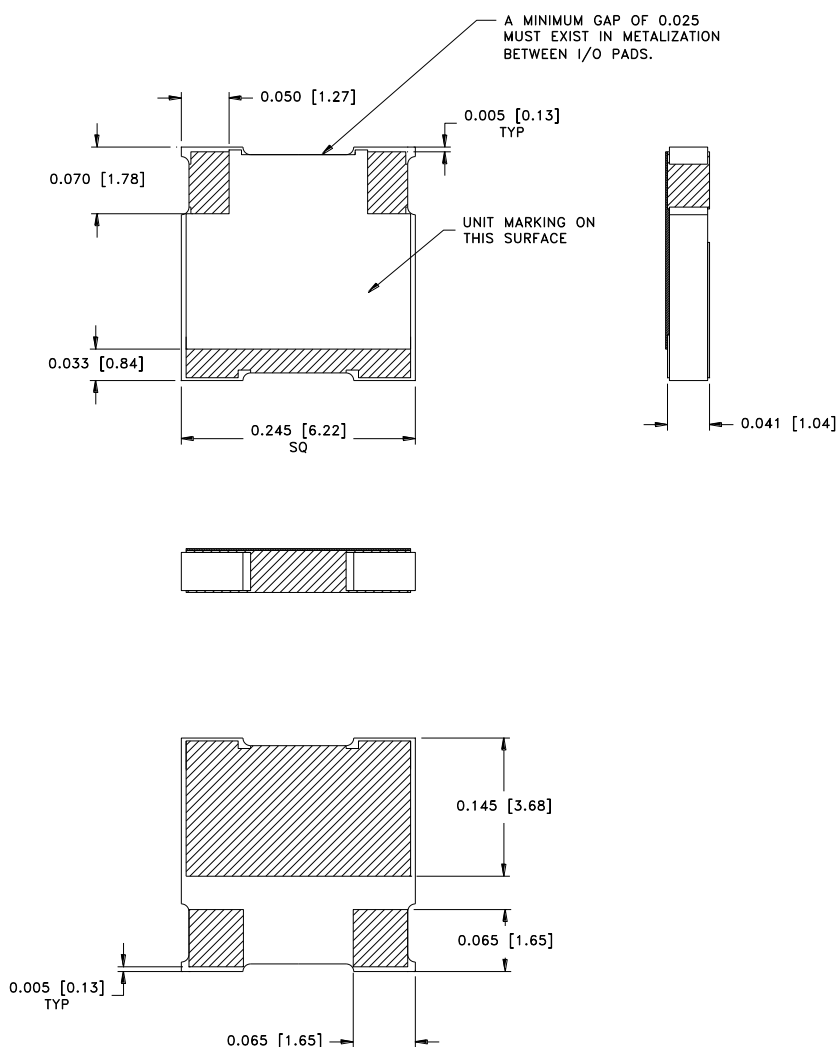
Thick Film, Nickel Barrier, Solder Plated

Metric Dimensions:

Provided for reference only

Workmanship

PER MIL-R-55342



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

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## 7.0 SUGGESTED MOUNTING FOOTPRINT

Part Number	Inches						mm					
	A	B	C	D	S	W	A	B	C	D	S	W
HPCA54XX.00W3	0.067	0.067	0.115	0.150	0.035	0.250	1.70	1.70	2.92	3.81	0.89	6.35

