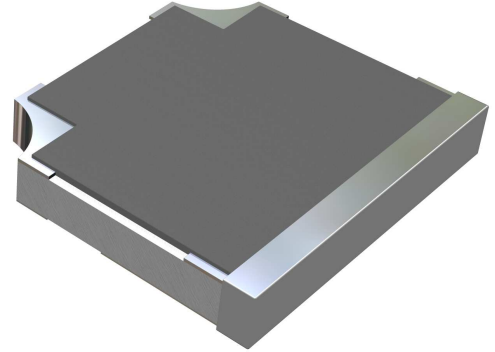


FEATURES

Aluminum Nitride
Low VSWR
Surface Mount

APPLICATIONS

Mobile Networks
Broadcast
High Power Amplifiers
Instrumentation
Isolators
Military
Satellite Communications



GENERAL DESCRIPTION

The 83A7044 series of Surface mount chip attenuators are designed for direct installation on printed circuit boards and manufactured using thick film technology. These Aluminum Nitride (AlN) devices are surface mountable using standard pick and place operation. All devices are available RoHS compliant.

SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance: 50 Ω
Frequency Range: DC – 6.0 GHz
Operating Temperature: -55 $^{\circ}\text{C}$ To +150 $^{\circ}\text{C}$
Power Rating: 10 Watts
Attenuation: 0 – 10 dB in 1dB Increments
15 and 20 dB
Attenuation Tolerance: See Table 1(1-10)
See Table 2(15 & 20)
VSWR: See Table 3(1-10)
See Table 4(15 & 20)

2.0 MECHANICAL

Finish: Silver Plated
Substrate: Aluminum Nitride
Resistive Element: Thick Film

3.0 UNIT MARKING

None

4.0 PACKAGING

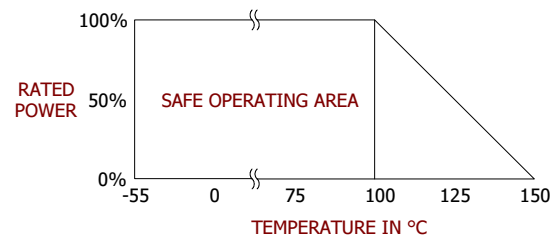
Standard: Tape and Reel

5.0 PART NUMBERING

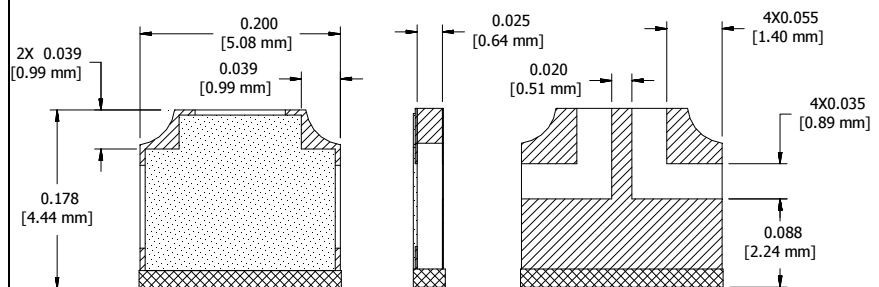
Part Identifier: 83A7044XX.XXF
XX.XX = dB Value

Note: Specifications are subject to change without notice.

POWER RATING AND DERATING



MECHANICAL



Unless Otherwise Specified: TOLERANCE: .XXX = $\pm .010$

6.0 TYPICAL PERFORMANCE

TABLE 1	
FREQUENCY	ATTENUATION TOLERANCE
DC – 1.0 GHz	± 0.3 dB
1.0 – 2.0 GHz	± 0.4 dB
2.0 – 3.0 GHz	± 0.6 dB
3.0 – 4.0 GHz	± 0.7 dB
4.0 – 6.0 GHz	± 0.9 dB

TABLE 2	
FREQUENCY	ATTENUATION TOLERANCE
DC – 2.0 GHz	± 0.5 dB
2.0 – 3.0 GHz	± 0.5 dB
3.0 – 4.0 GHz	± 1.0 dB
4.0 – 6.0 GHz	± 1.0 dB

TABLE 3	
FREQUENCY	VSWR
DC – 1.0 GHz	1.10:1 MAX
1.0 – 2.0 GHz	1.15:1 MAX
2.0 – 3.0 GHz	1.20:1 MAX
3.0 – 4.0 GHz	1.25:1 MAX
4.0 – 6.0 GHz	1.40:1 MAX

TABLE 4	
FREQUENCY	VSWR
DC – 2.0 GHz	1.25:1 MAX
2.0 – 3.0 GHz	1.25:1 MAX
3.0 – 4.0 GHz	1.50:1 MAX
4.0 – 6.0 GHz	1.50:1 MAX