





Surface Mount Attenuator 10 Watts

The D10AAXXZ4 is high performance Alumina (Al₂O₃) surface mount attenuator intended as a lower cost alternative to Aluminum Nitride (AIN) and Beryllium Oxide (BeO). The attenuator is well suited to all cellular frequency bands such as; AMPS, GSM, DCS, PCS, PHS and UMTS. The high power handling makes the part ideal for inter-stage matching, directional couplers, and for use in isolators.

Features:

- **RoHS Compliant**
- 10 Watts
- Low Cost
- **DC 4.0GHz**
- **Alumina Ceramic**
- **Non-Nichrome Resistive** Element
- Low VSWR
- 100% Tested

General Specifications

Resistive Element Thick film

Substrate Alumina Ceramic

Matte Tin over Sulfamate Nickel **Terminal Finish Operating Temperature** -55 to +125°C (see de rating chart)

Tolerance is ± 0.010 ", unless otherwise specified. Designed to meet or exceed applicable portions of MIL-E-5400. All dimensions in inches.

Electrical Specifications

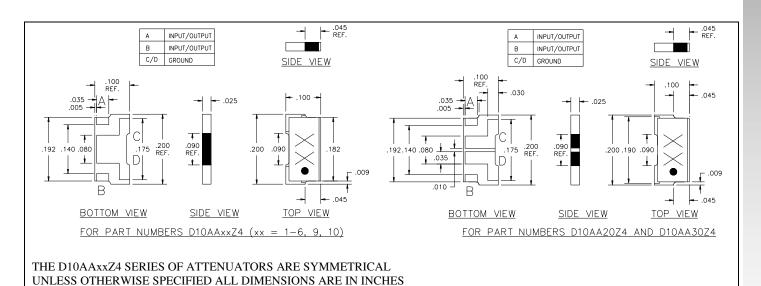
Attenuation Value: 1 - 7, 9, 10, 20 & 30dB

Power: 10 Watts Frequency Range: DC - 4.0GHz

VSWR See Specification Table

Specification based on unit properly installed using suggested mounting instructions and a 50 ohm nominal impedance. Specifications subject to change.

Outline Drawing





USA/Canada: Toll Free: Europe:

(315) 432-8909 (800) 544-2414 +44 2392-232392



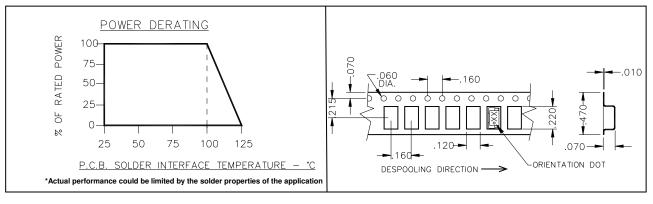


Specifications

	Frequency Range DC – 3.0Ghz		Frequency Range 3.0 – 4.0Ghz	
PART NUMBER	ATTENUATION (dB)	RL (dB)	ATTENUATION (dB)	RL (dB)
D10AA1Z4	1 ±0.30	19	1 ±0.30	15
D10AA2Z4	2 ±0.30	19	2 ±0.30	15
D10AA3Z4	3 ±0.30	19	3 ±0.30	15
D10AA4Z4	4 ±0.30	19	4 ±0.40	14
D10AA5Z4	5 ±0.30	19	5.1 ±0.35	14.75
D10AA6Z4	6 ±0.30	19	6 ±0.30	15
D10AA7Z4	7 ±0.30	19	7 ±0.30	12
D10AA9Z4	9 ±0.25	19	9 ±0.30	12
D10AA10Z4	10 ±0.25	19	10 ±0.35	14.75
D10AA20Z4	20 ±0.50	19	19.5 ±0.50	14.75
D10AA30Z4	30 ±1.50	19	30.25 ±1.5	15

Power De-rating

Tape and Reel



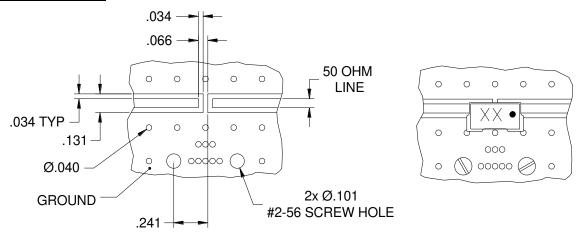
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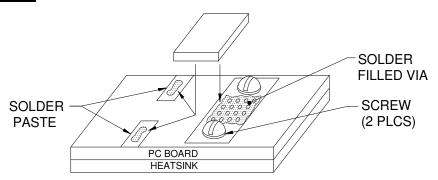
Mounting Footprint



DIMENSIONS GIVEN IN INCHES.

FOR BEST THERMAL PERFORMANCE THE PCS SHOULD BE PLACED WITH THERMAL JOINT COMPOUND TO THE HEAT SINK.

Mounting Procedure



MOUNTING PROCEDURE

- 1. DRILL THERMAL VIAS THROUGH PCB AND FILL WITH SOLDER, SUCH AS Sn96.
- 2. SOLDER PART IN PLACE USING Sn96 TYPE SOLDER WITH A CONTROLLED TEMPERATURE IRON (260°C).
- 3. TO ENSURE GOOD THERMAL CONNECTIVITY TO HEAT SINK, DRILL AND TAP HEATSINK AND MOUNT PCB BOARD TO HEATSINK USING SCREWS.



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