SERIES PPA

ATTENUATORS

High Power - DC-4GHz

The Aeroflex/KDI PPA Series of attenuators utilize a Beryllium Oxide chip and thin film technology to provide devices which can dissipate up to 100 watts of R.F. power. The PPA series must be thermally bonded to a heat sink, using the mounting holes provided, in order to operate within the temperature rating indicated. The flange temperatures must not exceed 100°C under rated power conditions.

ORDERING INFORMATION

The Power Attenuators listed are available in 1 dB increments from 1 thru 20 dB. Specify by selecting any of the series listed and add the attenuation value desired to the basic series designation. (See note 3)

EXAMPLE:









GENERAL SPECIFICATIONS						
Impedance	50 Ohms					
Operating Temp.	−55°C to +150°C					
Attenuation Stability	0.0001 dB/dB/°C					
Substrate	Beryllium Oxide Ceramic					
Resistive Element	Proprietary Thin Film					
Flange	Copper, Nickel Plated per QQ-N-290					
Tabs	Beryllium Copper, Gold Plated per MIL-G-45204					
Cover	Alumina Ceramic					

PERFORMANCE SPECIFICATIONS										
Model	Attenuation ⁽¹⁾ 1 dB Increments (dB)	Frequency ⁽¹⁾ Range	Input Power (Watts)	Attenuation Accuracy (1) (dB) dB DC-1 GHz 1-2.5 GHz 2.5-4 GHz				VSWR (Typical) ²		
PPA 10	1-20	DC-4 GHz	10	1-10 11-20	±0.5 ±1.0	±0.5 ±2.0	±1.0 ±3.0	1.3:1		
PPA 20	1-20	DC-4 GHz	20	1-5 6-9 10-15 16-20	±0.5 ±0.5 ±0.75 ±1.0	±0.5 ±0.5 ±1.0 ±2.0	±0.5 ±1.0 ±1.5 ±3.0	1.15:1 – DC-1.0 GHz 1.35:1 – 1.0-2.5 GHz 1.50:1 – 2.5-4.0 GHz		
PPA 50	1-20	DC-1 GHz	50	±0.3 DC-500 MHz ±0.5 500 MHz-1 GHz				1.25:1 – DC-500 MHz 1.50:1 – 500 MHz–1 GHz		
PPA 100	1-20	DC-500 MHz	100	±0.5			1.25:1 – DC-200 MHz 1.50:1 – 200-500 MHz			

PHYSICAL DIMENSIONS .040 [1.02] x .005±.001 THK [0.13±0.03] .003±.001 [0.08±0.03] .375 [9.52] .060 [1.52] TYP .171 [4.34] 1. Custom products .116 [2.95] DIA .175 [4.45] are available .160 [4.06] MAX. at higher .125 [3.18] MIN. TYP .125 [3.18] frequencies THRU 2 PLS with optimized VSWR and .300 [7.62] ⊕ .375 [9.53] attenuation accuracy over 100 [2 54] narrow frequency .100 [2.54] .250 [6.35] MIN TYP .200 [5.08] .062 [1.58] .725 [18.42] 2. VSWR as measured .110 [2.79] .125 [3.18] in a 0.125" ground .105 [2.67] .200 [5.08] MAX - .975 [24.77] → plane stripline circuit. **PPA10 OUTLINE PPA50 OUTLINE** 3. Standard values 1, 2, 3, 4, 5, 6, 10, 20 dB. .003±.001 [0.08±0.03] 1.250 [31.75] Non-std values available .060 [1.52] x 003±.001 THK [0.08±0.03] .875 [22.23] as special order. .171 [4.34] .405 [10.29] .150 [3.81] MAX .188 [4.76] .250 [6.35] MIN .116 [2.95] DIA. KOX .515 [13.08] .500 [12.70] .250 [6.35] MIN .250 [6.35] 125 [3.18] .125 [3.18] -.250 [6.35] .060 [1.52] TYP .125 [3.18] .500 [12.70] -.210 [5.33] MAX .105 [2.67] **PPA20 OUTLINE PPA100 OUTLINE**



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KEY: Inches [Millimeters] .XX \pm .03 .XXX \pm .010 [.X \pm 0.8 .XX \pm 0.25]

