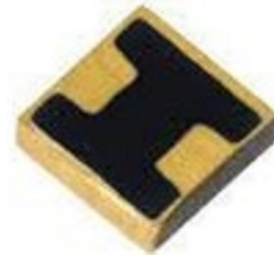




DC - 27.0 GHz.

Model: CVDA-0505-C-X

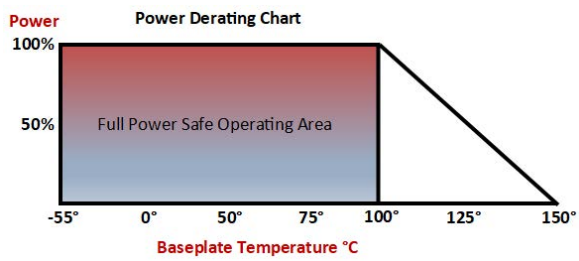
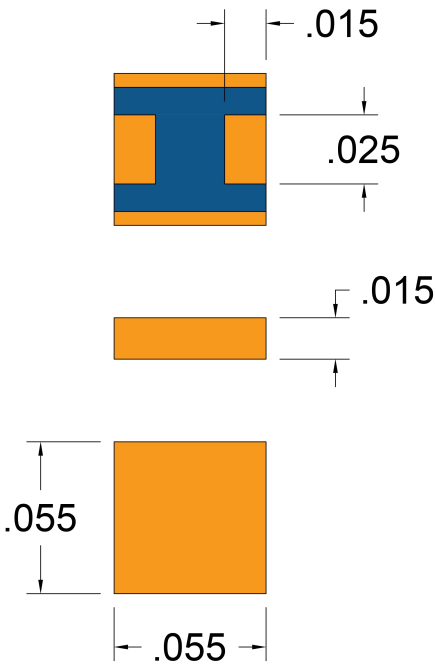


Chip Configuration

DIA-FILM Attenuators are manufactured using CVD Diamond substrate material which has the highest thermal conductivity of any material known to man for use with electronic components. These attenuator chips measure 0.055" x 0.055" x 0.015" having the capability of dissipating 20 watts of CW power from -65° to +150°C. With a low dielectric constant CVD Diamond is perfect for very high frequency component design. The attenuator structure is all thin-Film utilizing the latest thin-Film processing and pure metals. The resistor material is self-passivating Tantalum/Nitride combined with Titanium/Tungsten, Palatium, Nickel and Gold films which produces these high reliability components. These attenuators are available in chip form for Gold/Tin, Gold/Germanium, Soft-Solder attachment. Silver epoxy can be used but not recommended for power dissipation over 1 watt. The input/output pads are designed for wire-bonding, ribbon-bonding and soldering tabs or ribbons. They can be delivered in Gel-Pak, Waffle packaging or tape and reel. Please contact the factory for any special requirements or packaging. Tape and reel is standard. All chips are RoHS compliant and are designed to meet MIL-PRF-55342.

Specifications	
Attenuation Values	1 - 10 dB, 10, 15 & 30 dB
Power	20 Watts CW
Frequency Range	DC - 27.0 GHz.
Resistive Material	Tantalum/Nitride
Terminal Material	Palatium/Gold
Operating Temperature	-65° C to +150° C
Nominal Impedance	50 Ω

CVD DIAMOND CHIP ATTENUATOR SELECTION CHART						
Part Number	Attenuation (dB)	DC - 10 GHz	10 - 14 GHz	14 - 18 GHz	18 - 27 GHz	VSWR DC - 27 GHz
CVDA-0505-C-1	1.0	± 0.25	± 0.30	± 0.50	± 0.50	1.25 - 1.50 Max
CVDA-0505-C-2	2.0	± 0.25	± 0.30	± 0.50	± 0.50	1.25 - 1.50 Max
CVDA-0505-C-3	3.0	± 0.25	± 0.30	± 0.50	± 0.50	1.25 - 1.50 Max
CVDA-0505-C-4	4.0	± 0.25	± 0.30	± 0.50	± 0.75	1.25 - 1.50 Max
CVDA-0505-C-5	5.0	± 0.25	± 0.30	± 0.50	± 0.75	1.25 - 1.50 Max
CVDA-0505-C-6	6.0	± 0.25	± 0.30	± 0.50	± 0.75	1.25 - 1.50 Max
CVDA-0505-C-7	7.0	± 0.25	± 0.30	± 0.50	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-8	8.0	± 0.25	± 0.30	± 0.50	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-9	9.0	± 0.25	± 0.30	± 0.50	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-10	10.0	± 0.25	± 0.30	± 0.50	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-15	15.0	± 0.25	± 0.50	± 0.75	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-20	20.0	± 0.25	± 0.50	± 0.80	± 1.00	1.25 - 1.50 Max
CVDA-0505-C-30	30.0	± 0.25	± 0.50	± 1.00	± 1.50	1.25 - 1.50 Max



Part Number Example:
CVD A - 0505 - C - XX
 Diamond Attenuator Chip Size C=Chip dB Value
 01 - 10
 15, 20, 30