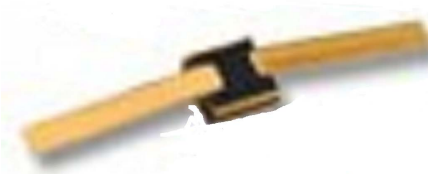




DC - 27.0 GHz.

Model: CVDA-0505-T-X

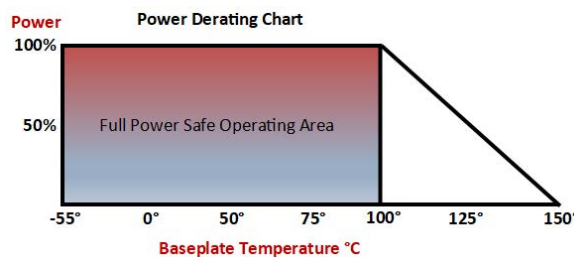
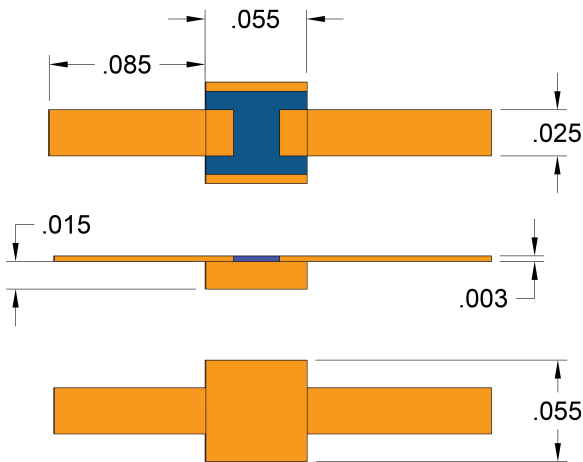
Chip & Tab Configuration



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, Palladium, Nickel and Gold films which produces these high reliability components. These attenuators are supplied with Copper, Gold Plated tabs and are attached with Gold/Tin brazing material at 280°C. Soft-Solder attachment is recommended using SN-96 Eutectic Solder. Silver epoxy can be used but not recommended for power dissipation over 1 watt. They can be delivered in Gel-Pak, Waffle packaging or tape and reel. Please contact the factory for any special requirements or packaging. Waffle packaging is standard. All chips are RoHS compliant and are designed to meet MIL-PRF-55342.

| CVD DIAMOND CHIP & TAB 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-T-1 | 1.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.50 | 1.25 - 1.50 Max |
| CVDA-0505-T-2 | 2.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.50 | 1.25 - 1.50 Max |
| CVDA-0505-T-3 | 3.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.50 | 1.25 - 1.50 Max |
| CVDA-0505-T-4 | 4.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.75 | 1.25 - 1.50 Max |
| CVDA-0505-T-5 | 5.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.75 | 1.25 - 1.50 Max |
| CVDA-0505-T-6 | 6.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 0.75 | 1.25 - 1.50 Max |
| CVDA-0505-T-7 | 7.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-8 | 8.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-9 | 9.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-10 | 10.0 | ± 0.25 | ± 0.30 | ± 0.50 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-15 | 15.0 | ± 0.25 | ± 0.50 | ± 0.75 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-20 | 20.0 | ± 0.25 | ± 0.50 | ± 0.80 | ± 1.00 | 1.25 - 1.50 Max |
| CVDA-0505-T-30 | 30.0 | ± 0.25 | ± 0.50 | ± 1.00 | ± 1.50 | 1.25 - 1.50 Max |

| 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 | Palladium/Gold |
| Operating Temperature | -65° C to +150° C |
| Nominal Impedance | 50 Ω |



Part Number Example:

CVD A - 0505 - T - XX

CVD: Diamond Attenuator Chip Size
 A: 0505
 T: Tab
 XX: dB Value (01 - 10, 15, 20, 30)