THIN FILM CHIP ATTENUATORS

FEATURES

- Surface mount chip attenuator ideal for applications (hybrid circuits) requiring precision attenuation in a small form factor
- Single component reduces circuit area and board space while replacing discrete components and improving performance
- Thin film technology insures a stable attenuation over time and temperature
- High reliability
- Wire bondable pads on top surface
- Ground wrap eliminates need for wire for shunt element
- Solder or conductive epoxy attach
- Excellent high frequency response - DC thru 22GHz
- 50 ohms impedance
- Power rating 250mW
- Substrate 99.9% alumina with TaN/TiW/Ni/Au metalization
- Attenuation range -1dB thru -20dB in 1 dB steps (0.5dB or custom attenuations available)
- Return loss - see measured performance

ELECTRICAL DATA

Parameter .................................. Specification
Frequency .................................. DC - 22GHz
Attenuation ......................... 1-20dB in 1dB increments
Attenuation Accuracy .................. ±0.5dB
Return Loss ......................... 1.45:1 VSWR; -15dB, DC-15GHz
......................................... 1.90:1 VSWR; -10 dB, 15-22GHz
Impedance ..................... 50 Ohms
Power Rating .................. 250mW, solder attach to heat sink
Size ....................... 60x75x10 mil
Substrate Material ........ 99.9% Alumina
Resistor Material .. Tantalum Nitride
Bond Pads ................ Wire Bondable Gold
Backside Metal ........ Solderable or Epoxy attach Ni/Au
THIN FILM CHIP ATTENUATORS

5 dB THIN FILM CHIP ATTENUATOR
MEASURED PERFORMANCE DATA

5dB Attenuator Loss
FMIAA001050DXAFGO

MECHANICAL OUTLINE

SatCon Electronics
165 Cedar Hill Street, Marlborough, MA 01752 Tel: 508.485.6350 Fax: 508.485.5168
www.satconelectronics.com