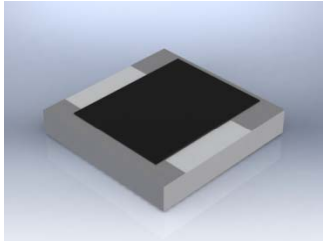


## Attenuator, Chip

## Model KPA20

Frequency Range: DC to 4.0 GHz, Power: 20 Watts



### Features

- Surface Mount (Drop-in or Bond and Wire)
- Thin Film Resistor
- Integrated Ground Wrap

KPA20 Attenuators are designed to reduce the signal power uniformly at different frequencies, temperatures and power levels. These surface mount Attenuators can be used in amplifier circuits, receivers, up/down converters, phase-matched arrays and switching networks. KPA20 series are available with solderable silver over nickel and tinned (lead and lead free) terminal finish options. Other designs, values and options may be available upon request.

### Technical Specifications

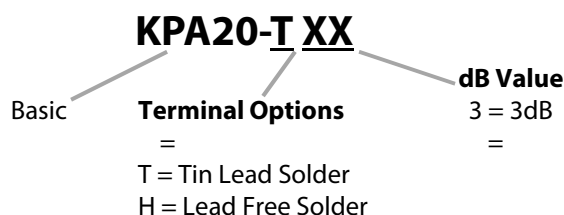
| Parameter            | Value   |
|----------------------|---|
| Frequency Range      | DC to 4.0 GHz   |
| Standard dB Values   | 1 thru 12 & 20dB  |
| Atten. Accuracy      | <u>DC - 1</u> <u>1 - 2.5</u> <u>2.5 - 4.0 GHz</u>         |
| 1 - 5dB              | ±0.5dB    ±0.5dB    ±0.5dB                                |
| 6 - 9dB              | ±0.5dB    ±0.5dB    ±1.0dB                                |
| 10 - 12dB            | ±0.75dB    ±1.0dB    ±1.5dB                               |
| 20dB                 | ±1.0dB    ±2.0dB    ±3.0dB                                |
| Power Handling*      | 20 Watts Max.   |
| VSWR                 | DC – 1 GHz    1.30:1 Max.<br>1.0 – 2.5 GHz<br>2.5-4.0 GHz |
| Operating Temp Range | -55°C to +150°C   |

### Material

| Feature           | Material  |
|-------------------|---|
| Substrate         | Beryllium Oxide   |
| Resistor Material | Proprietary Thin Film                                     |
| Finish            | Silver – (See "How to Order" for tinning & other options) |

\*Mounting surfaces shall not exceed 100°C. Max.

### How to Order



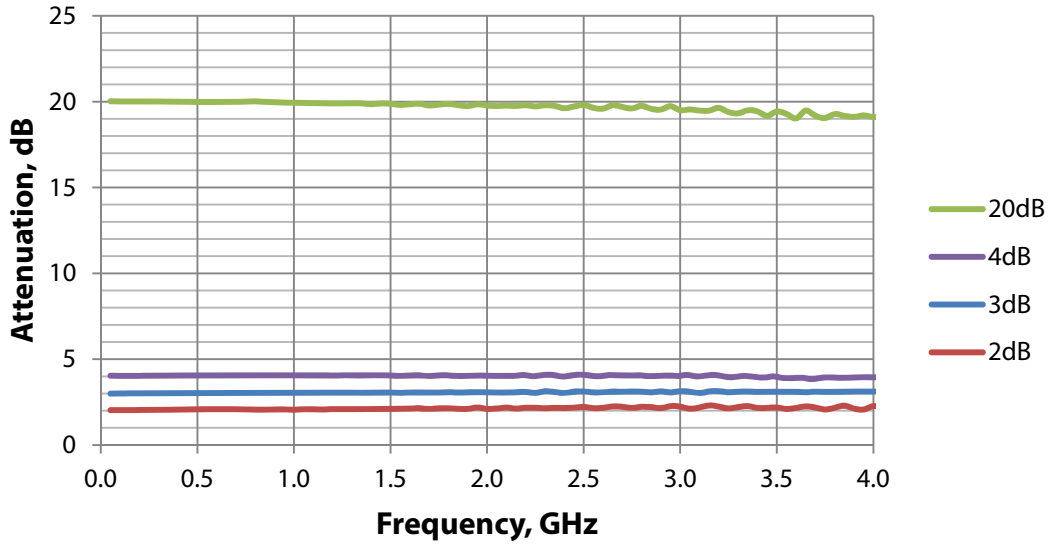
### Ordering Examples

Model Number: KPA20-6  
 Silver Terminal, 6dB

Model Number: KPA20-T3  
 Tin Lead Solder, 3dB

Performance Characteristics

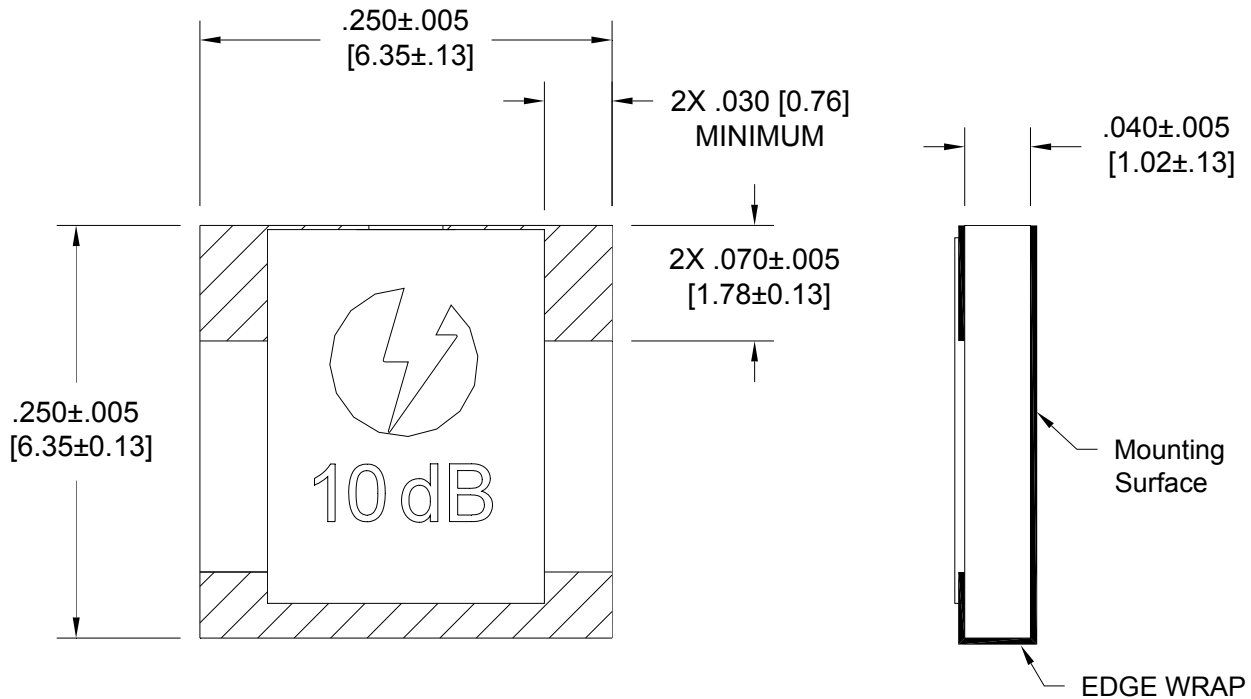
Typical Performance



Physical Dimensions

Model Number: KPA20-10 shown

Tolerance: .XXX" - ±.010"



Dimensions are for substrate only and do not include terminal thickness or optional tinning thickness.

Note: Dimensions in Brackets [ ] are expressed in Millimeters and are for reference only