

# Attenuators

## SMA Subminiature "MINIPAD"®

### DC - 26.5 GHz High Performance

- DC-2, DC-8, DC-12.4, and DC-18 GHz units available
- Rugged Stainless Steel Construction
- Any Male/Female combination available
- Low cost alternatives available

Midwest Microwave's SMA subminiature series of fixed coaxial attenuators (MINIPAD®) provide temperature stable, ruggedly built, precision performance in a compact light weight package size. Attenuation values up through 30 dB in 1 dB increments are available with any of the units described and with any combination of female or male SMA connectors.

#### SPECIFICATIONS - HIGH PERFORMANCE

**Frequency:** DC - 18.0, DC - 12.4, DC - 8.0 GHz  
DC - 4.0, and DC - 2.0 GHz

**Attenuation Accuracy:** 1-6 dB ± 0.3dB  
7-20 dB ± 0.5 dB  
21-30 dB ± 1.0 dB

**VSWR:** 1.07+.015 (f GHz) max.

**Power:** 2 Watts Average @ +25°C derated linearly to .5 watts @ +125°C

**Peak Power:** 200 Watts

**Operating Temperature Range:** -65 to +125C

**Finish:** Passivated Stainless Steel



#### TYPE II LOW VSWR - HIGH PERFORMANCE IMPROVED SPECIFICATIONS

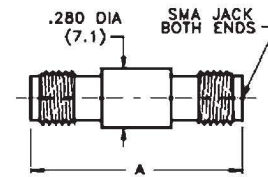
| Frequency GHz | VSWR     |
|---------------|----------|
| DC - 4.0 GHz  | 1.12 max |
| 4.0 - 8.0 GHz | 1.15 max |
| 8.0 - 18 GHz  | 1.20 max |

| DC - 26.5 GHz  |                    | 298 Series | Model Numbers      |
|--|--------------------|------------|--------------------|
| Male/Female  | Female/Female      |            | Male/Male          |
| ATT-0298-XX-SMA-02   | ATT-298F-XX-SMA-02 |            | ATT-298M-XX-SMA-02 |
| XX = Attenuation Value: Select 01-30dB in 1dB increments<br>(.5 dB increments available) |                    |            |                    |
| <i>HIGH PERFORMANCE</i>  |                    |            |                    |



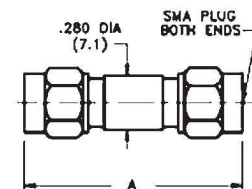
| Attenuation Value | Length A |
|-------------------|----------|
| 1-12 dB           | 0.86     |
| 13-30 dB          | 1.02     |

| DC - 18 GHz  |                    | 290 Series | Model Numbers      |
|--|--------------------|------------|--------------------|
| Male/Female  | Female/Female      |            | Male/Male          |
| ATT-0290-XX-SMA-02   | ATT-290F-XX-SMA-02 |            | ATT-290M-XX-SMA-02 |
| XX = Attenuation Value: Select 01-30dB in 1dB increments<br>(.5 dB increments available) |                    |            |                    |
| <i>HIGH PERFORMANCE</i>  |                    |            |                    |



| Attenuation Value | Length A |
|-------------------|----------|
| 1-12 dB           | 0.90     |
| 13-30 dB          | 1.03     |

| DC - 12.4 GHz  |                    | 291 Series | Model Numbers      |
|--|--------------------|------------|--------------------|
| Male/Female  | Female/Female      |            | Male/Male          |
| ATT-0291-XX-SMA-02   | ATT-291F-XX-SMA-02 |            | ATT-291M-XX-SMA-02 |
| XX = Attenuation Value: Select 01-30dB in 1dB increments<br>(.5 dB increments available) |                    |            |                    |
| <i>HIGH PERFORMANCE</i>  |                    |            |                    |



| Attenuation Value | Length A |
|-------------------|----------|
| 1-12 dB           | 0.98     |
| 13-30 dB          | 1.12     |