Fixed Coaxial Attenuators

Model 1
Model 2

Precision N Connectors

Features

- Rugged injection molded connectors.
- Designed to meet environmental requirements of MIL-DTL-3933.

Specifications

NOMINAL IMPEDANCE: 50 Ω
FREQUENCY RANGE:
- Model 1: dc to 12.4 GHz
- Model 2: dc to 18.0 GHz

MAXIMUM DEVIATION OVER FREQUENCY:

<table>
<thead>
<tr>
<th>Nominal ATTN (dB)</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>± 0.30</td>
<td>± 0.30</td>
</tr>
<tr>
<td>10, 20</td>
<td>± 0.30</td>
<td>± 0.50</td>
</tr>
<tr>
<td>30, 40</td>
<td>± 0.75</td>
<td>± 1.00</td>
</tr>
<tr>
<td>50</td>
<td>± 0.75</td>
<td>± 1.25</td>
</tr>
<tr>
<td>60</td>
<td>± 1.00</td>
<td>± 1.50</td>
</tr>
</tbody>
</table>

Typical Attenuation Performance of Model 2-10

MAXIMUM SWR:

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>dc - 4</td>
<td>1.15</td>
<td>1.15</td>
</tr>
<tr>
<td>4 - 8</td>
<td>1.20</td>
<td>1.20</td>
</tr>
<tr>
<td>8 - 12.4</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>12.4 - 18</td>
<td>1.35</td>
<td></td>
</tr>
</tbody>
</table>

Typical SWR of Model 2-10

POWER RATING: 5 watts average @ 25°C ambient temperature, derated linearly to 0.5 watt @ 125°C.
1 kilowatt peak (5 μsec pulse width; 0.25% duty cycle)

POWER COEFFICIENT: <0.005 dB/dB/Watt

TEMPERATURE COEFFICIENT: < 0.0004 dB/dB/°C

TEMPERATURE RANGE: -55°C to +125°C

TEST DATA: Swept data plots of attenuation and SWR from 50 MHz to 12.4 / 18 GHz is available at additional cost.

CONNECTORS: Precision Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

CONSTRUCTION: Stainless steel body and connectors; gold plated beryllium copper contacts.

WEIGHT:

- dB VALUE
- WEIGHT (Net)
- 1 - 10, 20, 30 71 g (2.5 oz)
- 40, 50, 60 79 g (2.8 oz)

PHYSICAL DIMENSIONS:

- dB VALUE
- DIM A
- 1-10, 20, 30 57.9 (2.28)
- 40, 50, 60 68.1 (2.68)

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

MODEL NUMBER DESCRIPTION:

Example:

1 - XX

Basic Model Number Attenuation Value (dB)

ATTENUATOR SET (AS-6): Model 2 is also available in an Attenuator Set which includes four different attenuators (3, 6, 10, 20 dB). Refer to Attenuator Sets data sheet for more information.