0.1 to 40.0GHz 5-Bit
30dB Digital Attenuator
PMI Model No. DTA-100M40G-30-CD-1

PMI Model DTA-100M40G-30-CD-1 is a 5-Bit programmable 30dB PIN diode attenuator with a step resolution of 1.0dB over the frequency range of 100MHz to 40GHz. This model operates on a single +15VDC supply and draws only 40mA of current. Very high levels of attenuation accuracy of 0.6dB is achieved. This attenuator provides ultra-fast switching speeds of 300nsec and has an operating input power rating of +20dBm. This model is supplied in a small, light-weight housing measuring 2.0 x 1.8 x 0.5 inches.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>100MHz to 40GHz</td>
</tr>
<tr>
<td>Mean Attenuation Range</td>
<td>30dB</td>
</tr>
<tr>
<td>LSB</td>
<td>1.0dB</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>5.0dB Typ. (Up to 20GHz)</td>
</tr>
<tr>
<td></td>
<td>8.0dB Typ. (Up to 40GHz)</td>
</tr>
<tr>
<td>VSWR</td>
<td>2.5:1 Max.</td>
</tr>
<tr>
<td>Accuracy of Attenuation</td>
<td>±2.5dB typ</td>
</tr>
<tr>
<td>Minimum Attenuation Step</td>
<td>1.0dB</td>
</tr>
<tr>
<td>Power Handling Capability</td>
<td>+24dBm CW max</td>
</tr>
<tr>
<td>Input 1dB Compression</td>
<td>+20dBm typ</td>
</tr>
<tr>
<td>Switching Time</td>
<td></td>
</tr>
<tr>
<td>On Time</td>
<td>1.0usec max</td>
</tr>
<tr>
<td>Off Time</td>
<td>0.5usec max</td>
</tr>
<tr>
<td>Logic Input</td>
<td></td>
</tr>
<tr>
<td>Logic “0”(Bit Off)</td>
<td>0 to +0.8V</td>
</tr>
<tr>
<td>Logic “1”(Bit On)</td>
<td>+2.0 to +5.0V</td>
</tr>
<tr>
<td>Power Supply</td>
<td>15V @ 50mA max</td>
</tr>
<tr>
<td>Connectors</td>
<td>(2) 2.92mm(F) &amp; 15 Pin Micro-D Female</td>
</tr>
<tr>
<td>Size</td>
<td>2.0 x 1.8 x 0.5</td>
</tr>
</tbody>
</table>