Digital, Variable Attenuator
PMI Model No. DTA-100M40G-30-CD-1

PMI Model Number DTA-100M40G-30-CD-1 is a 5-Bit, digitally controlled 30dB PIN diode attenuator with a step resolution of 1dB covering the frequency range of 100MHz to 40GHz. This model operates on +5VDC and only draws 40mA. Attenuation accuracy of 0.6dB is achieved due to PMI's proprietary digital calibration techniques. This model offers excellent attenuation flatness over the full 100MHz to 40GHz frequency range and and operate with input power levels up to +20dBm. This unit is supplied in a very small housing that measures 2.0 x 1.8 x 0.5 inches.

<table>
<thead>
<tr>
<th>Specifications:</th>
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<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>
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<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>Power Rating</td>
<td>+24dBm CW Max.</td>
</tr>
<tr>
<td>Input 1dB Compression</td>
<td>+20dBm Typ.</td>
</tr>
<tr>
<td>Attenuation Accuracy</td>
<td>0.6dB Typ.</td>
</tr>
<tr>
<td>Switching Speed</td>
<td>300nsec Typical, 1usec Max.</td>
</tr>
<tr>
<td>Digital Control</td>
<td>5-Bit Binary TTL</td>
</tr>
<tr>
<td>Input Tracking</td>
<td>Monotonic</td>
</tr>
<tr>
<td>DC Voltage</td>
<td>+15 @ 40mA Typical</td>
</tr>
<tr>
<td>DC Connector</td>
<td>15 Pin D-Sub Female (mating Connector Supplied)</td>
</tr>
<tr>
<td>RF Connectors</td>
<td>2.92mm Female</td>
</tr>
<tr>
<td>Size</td>
<td>2.0 x 1.8 x 0.5</td>
</tr>
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<table>
<thead>
<tr>
<th>Environmental Ratings:</th>
<th></th>
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<tbody>
<tr>
<td>Temperature:</td>
<td>-50°C to +85 °C Operating</td>
</tr>
<tr>
<td></td>
<td>-65 °C to +125 °C Non-Operating</td>
</tr>
<tr>
<td>Temperature Cycle:</td>
<td>MIL-STD-202F, Method 107D Cond. A</td>
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</tbody>
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