IMA Series

Surface Mount Thick Film Attenuator

ORDERING INFORMATION

IMA2314-03D5 (Sample P/N)

IMAxxx - XX - DX

Part # dB Increment

00-40 (0 denotes whole value)

+0.5dB available up to 16.5dB

For packaging options please visit our website
www.ims-resistors.com/packaging

RoHS Compliant = RoHS

ULR = Ultra Leach Resistant

• 0.122” x 0.145” Size
• Characterized to 12.4GHz
• RoHS compliant or Sn62 solder available
• Attenuation to 40dB
• Half dB increments up to 16.5dB

At the circuit level, with proper application of RF principles, these attenuators, and their variations, are capable of operating up to 20 GHz with a manageable VSWR.

Attenuation Accuracy

<table>
<thead>
<tr>
<th>Increment</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3.5dB</td>
<td>+/- 0.2dB</td>
</tr>
<tr>
<td>4 - 19dB</td>
<td>+/- 0.3dB</td>
</tr>
<tr>
<td>20 - 30dB</td>
<td>+/- 0.5dB</td>
</tr>
<tr>
<td>31 - 40dB</td>
<td>+/- 1.0dB</td>
</tr>
</tbody>
</table>

S-Parameters, Mag. / Phase, 6dB T-Pad

1.0 To 10GHz - P/N: IMA2314-06D0 mounted to 0.015” thick, 50Ω alumina

<table>
<thead>
<tr>
<th>FREQ (GHz)</th>
<th>S11 mag</th>
<th>S11 phase</th>
<th>S21 mag</th>
<th>S21 phase</th>
<th>VSWR</th>
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</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.020</td>
<td>-91.995</td>
<td>0.501</td>
<td>-1.799</td>
<td>1.040</td>
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<tr>
<td>2.10</td>
<td>0.041</td>
<td>-92.998</td>
<td>0.501</td>
<td>-3.780</td>
<td>1.086</td>
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<tr>
<td>3.02</td>
<td>0.059</td>
<td>-94.046</td>
<td>0.500</td>
<td>-5.428</td>
<td>1.126</td>
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<tr>
<td>4.12</td>
<td>0.081</td>
<td>-95.361</td>
<td>0.499</td>
<td>-7.400</td>
<td>1.175</td>
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<tr>
<td>5.04</td>
<td>0.098</td>
<td>-96.473</td>
<td>0.497</td>
<td>-9.038</td>
<td>1.218</td>
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<td>5.96</td>
<td>0.116</td>
<td>-97.588</td>
<td>0.496</td>
<td>-10.670</td>
<td>1.263</td>
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<td>7.06</td>
<td>0.137</td>
<td>-98.926</td>
<td>0.494</td>
<td>-12.617</td>
<td>1.317</td>
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<td>7.98</td>
<td>0.154</td>
<td>-100.035</td>
<td>0.492</td>
<td>-14.230</td>
<td>1.365</td>
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<td>9.08</td>
<td>0.175</td>
<td>-101.358</td>
<td>0.489</td>
<td>-16.153</td>
<td>1.423</td>
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<tr>
<td>10.0</td>
<td>0.192</td>
<td>-102.451</td>
<td>0.486</td>
<td>-17.744</td>
<td>1.474</td>
</tr>
</tbody>
</table>

IMA2314 RoHS Full Wraparound
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder

IMA2373 RoHS Full Wraparound
Terminal Material: PtAg
Attachment: Solder or Epoxy

IMA2609 RoHS Full Wraparound
Terminal Material: PtAg w/ Sn96 Solder
Attachment: Solder

IMA2686 RoHS ULR Full Wraparound
Terminal Material: ULR PtAg
Attachment: Solder or Epoxy

Single-Sided & Single-Wrap Styles

IMA2381 RoHS Single-Sided
Terminal Material: PtAg
Attachment: Solder or Epoxy

IMA2370 Single-Sided with Backplane
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder

IMA2371 Single-Wrap to Backplane
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder