Ceramic Directional Coupler

50Ω  30 dB Coupling  700 to 2700 MHz

Features
• Wideband, 700-2700 MHz
• Low insertion loss, 0.2 dB typ.
• Excellent return loss for input/output ports ideal for signal-tap
• Ultra small size, 0603 (1.6 x 0.8 mm)
• Temperature stable
• LTCC construction

Applications
• GSM  • LTE
• SMR  • Wi-Fi
• ISM  • UMTS

Maximum Ratings
Operating Temperature  -55°C to 100°C
Storage Temperature  -55°C to 100°C
Permanent damage may occur if any of these limits are exceeded.

Pad Connections
INPUT  1
OUTPUT  6
COUPLED  3
TERMINATION  4
GROUND  2.5

Electrical Specifications at 25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>700-2700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline Loss</td>
<td>—</td>
<td>0.2</td>
<td>0.5</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Coupling</td>
<td>700-1000</td>
<td>30±1.5</td>
<td>—</td>
<td>—</td>
<td>dB</td>
</tr>
<tr>
<td>Coupling Flatness(±)</td>
<td>1000-2700</td>
<td>1.5</td>
<td>—</td>
<td>—</td>
<td>dB</td>
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<tr>
<td>Directivity</td>
<td>700-2170</td>
<td>10</td>
<td>14</td>
<td>—</td>
<td>dB</td>
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<tr>
<td>Return Loss (Input)</td>
<td>700-2700</td>
<td>15</td>
<td>23</td>
<td>—</td>
<td>dB</td>
</tr>
<tr>
<td>Return Loss (Output)</td>
<td>700-2700</td>
<td>15</td>
<td>23</td>
<td>—</td>
<td>dB</td>
</tr>
<tr>
<td>Input Power</td>
<td>700-2700</td>
<td>2</td>
<td></td>
<td>—</td>
<td>W</td>
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</tbody>
</table>

Notes:
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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