BI-DIRECTIONAL COUPLER
SURFACE MOUNT MODEL: KDS-30-30

WIDE BANDWIDTH

30 - 512 MHz

FEATURES:
► High Power Rating
► Low Insertion Loss
► Excellent Coupling Flatness
► High Directivity

APPLICATION:
► Antenna Signal Monitoring

SPECIFICATIONS (Rev. A 04/02/10)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>30 - 512 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupling</td>
<td>27.5 ±0.8 dB (Nom.)</td>
</tr>
<tr>
<td>Coupling Flatness</td>
<td>±0.75 dB (Max.)</td>
</tr>
<tr>
<td>Insertion Loss 1</td>
<td>0.28 dB (Max.)</td>
</tr>
<tr>
<td>Directivity (dB) 2</td>
<td>Typ. 23</td>
</tr>
<tr>
<td>Input Power Rating 3</td>
<td>50 Watts (Nom.)</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.2:1 (Typ.)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 to +85 °C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-55 to +100 °C</td>
</tr>
</tbody>
</table>

1 Excluding Coupling Loss.
2 Directivity is the isolation value minus the coupling value.
3 For any load impedance connected to the output port.

PORT CONFIGURATION

<table>
<thead>
<tr>
<th>Package #</th>
<th>255</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

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WIDE BANDWIDTH 30 - 512 MHz

PERFORMANCE PLOTS

Insertion Loss (dB)

S21 Main Line
S34 Coupled Line

Directivity (dB)

In - Rev. Cpl
Out - Fwd. Cpl
BI-DIRECTIONAL COUPLER
SURFACE MOUNT MODEL: KDS-30-30

WIDE BANDWIDTH

30 - 512 MHz

PERFORMANCE PLOTS

S11 (In)
S22 (Out)
S33 (Fwd. Cpl)
S44 (Rev. Cpl)

S41 In-Rev. Cpl.
S32 Out-Fwd. Cpl

Frequency (MHz)

Return Loss (dB)
Isolation (dB)