FEATURES:
- Optimized Bandwidth
- Small Package Size, Surface Mount
- Building Block For:
  - Power Amplifiers
  - Image Rejection Mixers
  - I & Q / SSB Modulators
  - Phase Shifters & More...

SPECIFICATIONS (Rev. A 02/24/10)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>118 - 174 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (dB)*</td>
<td>Typ. 0.3  Max. 0.6</td>
</tr>
<tr>
<td>Amplitude Unbalance (dB)</td>
<td>Typ. 0.4  Max. 1.0</td>
</tr>
<tr>
<td>Phase Unbalance (Deg.)</td>
<td>Typ. 1.0  Max. 3.0</td>
</tr>
<tr>
<td>Isolation (dB)</td>
<td>Typ. 23  Min. 18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Package #</th>
<th>102S</th>
</tr>
</thead>
</table>

PORT CONFIGURATION

<table>
<thead>
<tr>
<th>Input</th>
<th>Isolated*</th>
<th>+90º Output</th>
<th>0º Output</th>
<th>GND</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>All Others</td>
</tr>
</tbody>
</table>

* Insertion loss in excess of the theoretical 3 dB coupling.
* Terminate ISOLATED port with 50 Ohms.
90° HYBRID
SURFACE MOUNT MODEL: DQS-118-174
OPTIMIZED BANDWIDTH
118 - 174 MHz

Data @ 25°C

PERFORMANCE PLOTS

Insertion Loss (dB)

Frequency (MHz)

Isolation (dB)

Frequency (MHz)
90° HYBRID
SURFACE MOUNT MODEL: DQS-118-174

OPTIMIZED BANDWIDTH
118 - 174 MHz

Data @ 25°C

PERFORMANCE PLOTS

Phase Unbalance (deg.)

Frequency (MHz)

Return Loss (dB)

Frequency (MHz)

S11  S22  S33  S44
90° HYBRID
SURFACE MOUNT MODEL: DQS-118-174
OPTIMIZED BANDWIDTH
118 - 174 MHz

Data @ 25°C

PERFORMANCE PLOTS