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

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency</th>
<th>20 - 310 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (dB) *</td>
<td>Typ.</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>Amplitude Unbalance (dB)</td>
<td>Typ.</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Phase Unbalance (Deg.)</td>
<td>Typ.</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>Isolation (dB)</td>
<td>Typ.</td>
</tr>
<tr>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

* Insertion loss in excess of the theoretical 3 dB coupling.

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>8</td>
<td>7</td>
<td>All Others</td>
</tr>
</tbody>
</table>

* Terminate ISOLATED port with 50 Ohms.
90° HYBRID
SURFACE MOUNT MODEL: DQS-20-310
WIDE BANDWIDTH

20 - 310 MHz

PERFORMANCE PLOTS

Data @ 25°C
90° HYBRID
SURFACE MOUNT MODEL: DQS-20-310
WIDE BANDWIDTH 20 - 310 MHz

DATA @ 25°C

PERFORMANCE PLOTS

Phase Unbalance (deg.) vs. Frequency (MHz)

Return Loss (dB) vs. Frequency (MHz)
90° HYBRID
SURFACE MOUNT MODEL: DQS-20-310
WIDE BANDWIDTH

20 - 310 MHz

Data @ 25°C

PERFORMANCE PLOTS

Group Delay (nSec)

Frequency (MHz)

Copyright © Synergy Microwave Corporation