# 90° HYBRID

**SURFACE MOUNT MODEL: SLQ-72**

**10% BANDWIDTH**

**Fc = 1575 MHz**

---

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

---

**SPECIFICATIONS (Rev. C 09/13/03)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1496 - 1654 MHz</td>
</tr>
<tr>
<td>Insertion Loss (dB) *</td>
<td>Typ. 0.3, Max. 0.6</td>
</tr>
<tr>
<td>Amplitude Unbalance</td>
<td>Typ. 0.2, Max. 1.0</td>
</tr>
<tr>
<td>Phase Unbalance (Deg.)</td>
<td>Typ. 2.0, Max. 5.0</td>
</tr>
<tr>
<td>Isolation (dB)</td>
<td>Typ. 17, Min. 13</td>
</tr>
<tr>
<td>Power Rating</td>
<td>1 Watt (Max.)</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.4:1 (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>

* Insertion loss is the average loss of the 2 coupling values in excess of the theoretical 3 dB coupling.

---

**Package # 159**

![Package Diagram](image)

**Port Configuration**

<table>
<thead>
<tr>
<th>Input</th>
<th>Isolated*</th>
<th>+90° Output</th>
<th>0° Output</th>
<th>GND,**</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3,4</td>
</tr>
</tbody>
</table>

* Terminate ISOLATED port in 50 Ohms EXTERNALLY.
** Ground Externally

---

---
90° HYBRID
SURFACE MOUNT MODEL: SLQ-72

Fc = 1575 MHz
10% BANDWIDTH

Data @ 25°C

PERFORMANCE PLOTS

Coupling/Insertion Loss/Amp. Unbal. (dB)
Frequency (MHz)

Isolation (dB)
Frequency (MHz)
90° HYBRID
SURFACE MOUNT MODEL: SLQ-72

10% BANDWIDTH

Fc = 1575 MHz

Data @ 25°C

PERFORMANCE PLOTS

Phase Unbalance (deg.)

Frequency (MHz)

Return Loss (dB)

Frequency (MHz)

S11, S22, S33, S44