

# 90° HYBRID

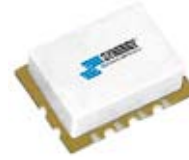
## SURFACE MOUNT MODEL: SMQ-C09

**3:1 BANDWIDTH**

**14 - 42 MHz**

**FEATURES:**

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



**SPECIFICATIONS (Rev. B 10/04/07)**

<b>Frequency</b>	14 - 42 MHz	
<b>Insertion Loss (dB) *</b>	Typ	Max
	0.4	0.9
<b>Amplitude Unbalance (dB)</b>	Typ	Max
	0.6	0.9
<b>Phase Unbalance (Deg.)</b>	Typ	Max
	1.0	3.0
<b>Isolation (dB)</b>	Typ	Min
	17	14
<b>Power Rating</b>	1 Watt (Max)	
<b>Impedance</b>	50 Ohms (Nom)	
<b>VSWR</b>	1.15:1 (Typ)	
<b>Operating Temperature Range</b>	-40 to +85 °C	
<b>Storage Temperature Range</b>	-55 to +100 °C	

\* Signal loss in excess of the theoretical 3 dB coupling.

<b>Package #</b>	<b>129</b>
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Port Configuration					
Input	Isolated*	+90° Output	0° Output	GND.**	No. Conn.
5	6	1	2	7,8,9,10	3,4

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

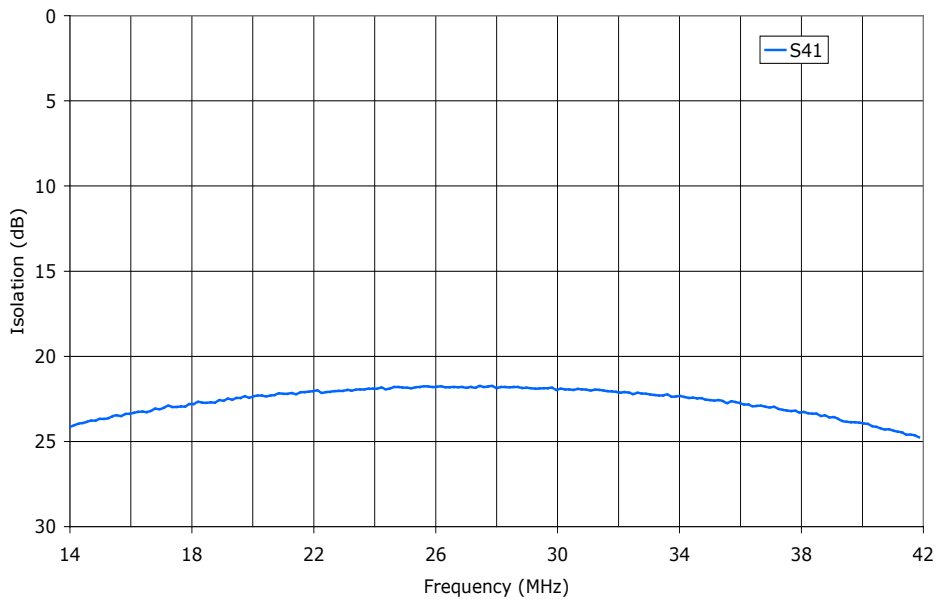
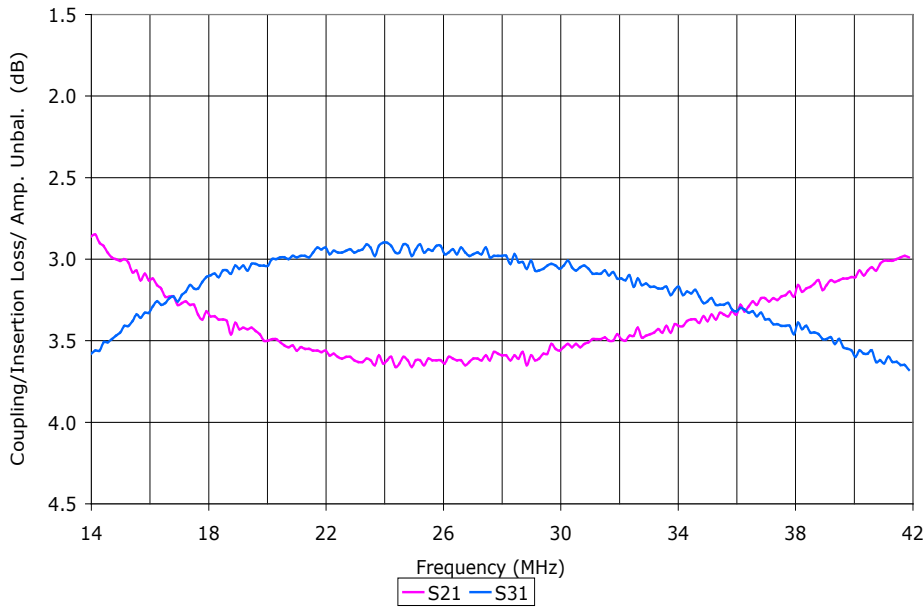
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Data @ 25°C



PERFORMANCE PLOTS

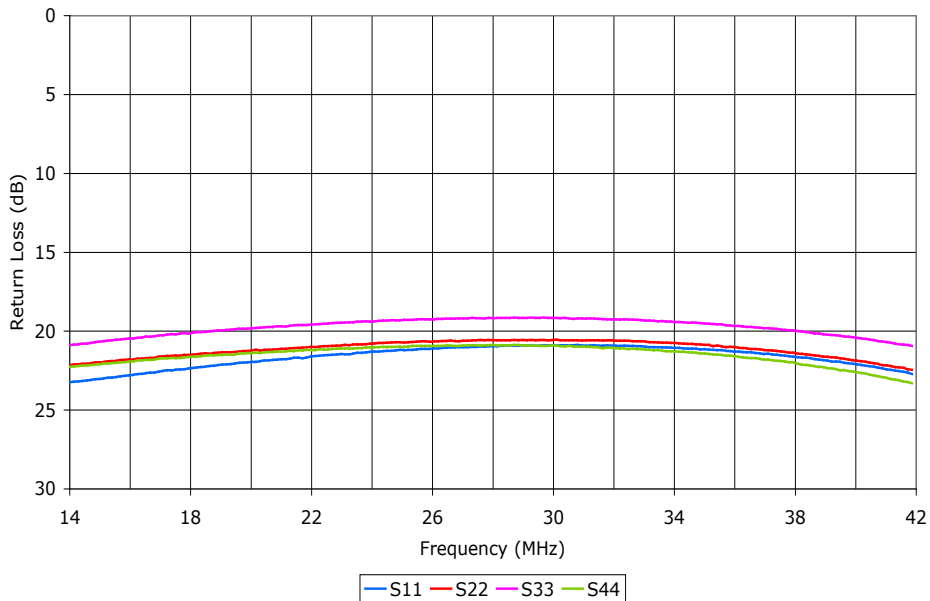
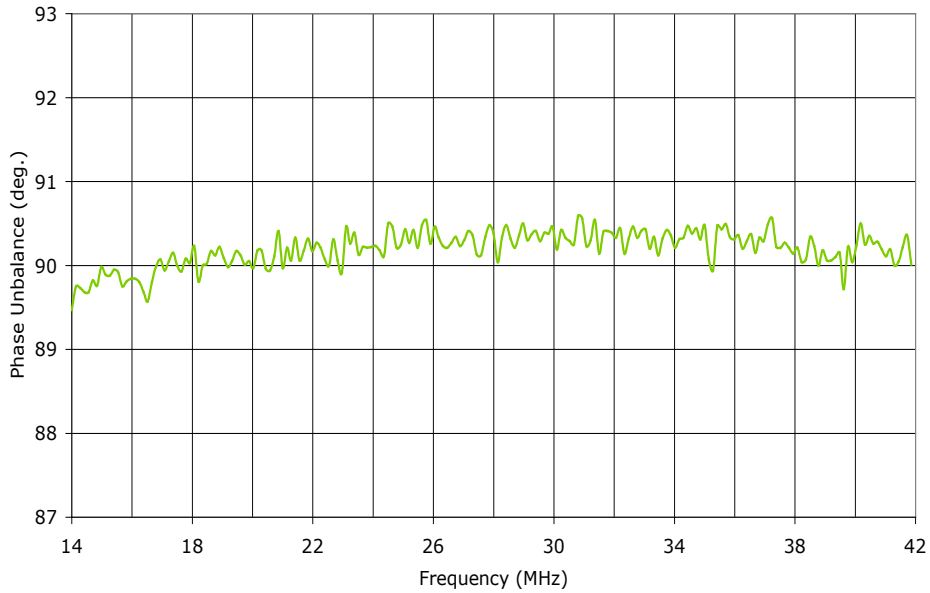
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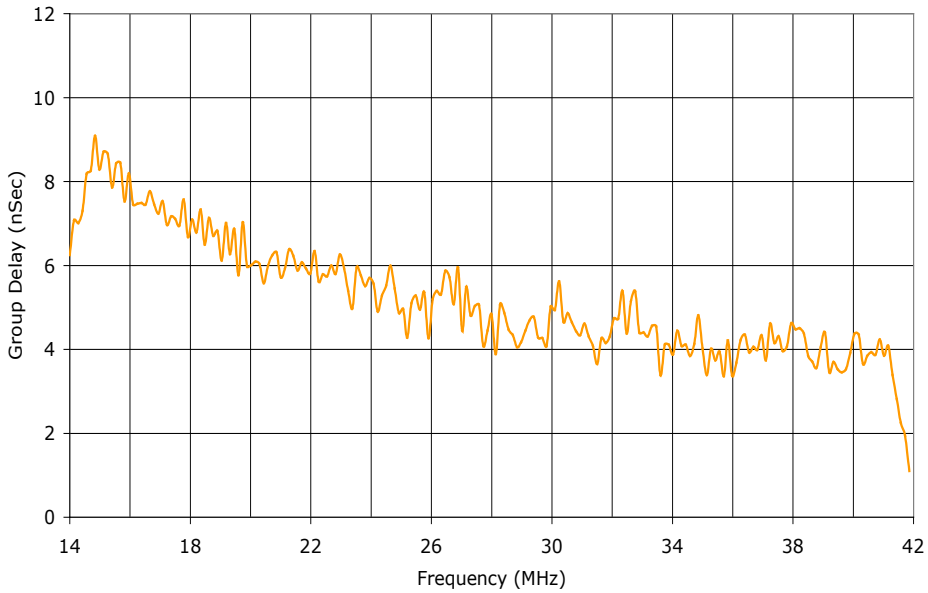
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