

90° HYBRID

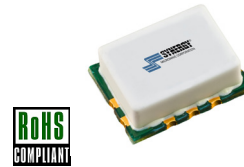
SURFACE MOUNT MODEL: SMQ-C01

2:1 BANDWIDTH

20 - 40 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. E 05/21/24)

Frequency	20 - 40 MHz	
Insertion Loss (dB) *	Typ.	Max.
	0.3	0.6
Amplitude Unbalance	Typ.	Max.
	0.3	0.75
Phase Unbalance (Deg.)	Typ.	Max.
	1	3
Isolation (dB)	Typ.	Min.
	28	20
Power Rating	1 Watt (Max.)	
Impedance	50 Ohms (Nom.)	
VSWR	1.15:1 (Typ.)	
Operating Temperature Range	-40 to +85 °C	
Storage Temperature Range	-55 to +100 °C	

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

Package #	129LF-2
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PACKAGE MOUNTING: SEE APPLICATION NOTE AN7301.
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
 DIMENSIONS ARE IN INCHES.

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

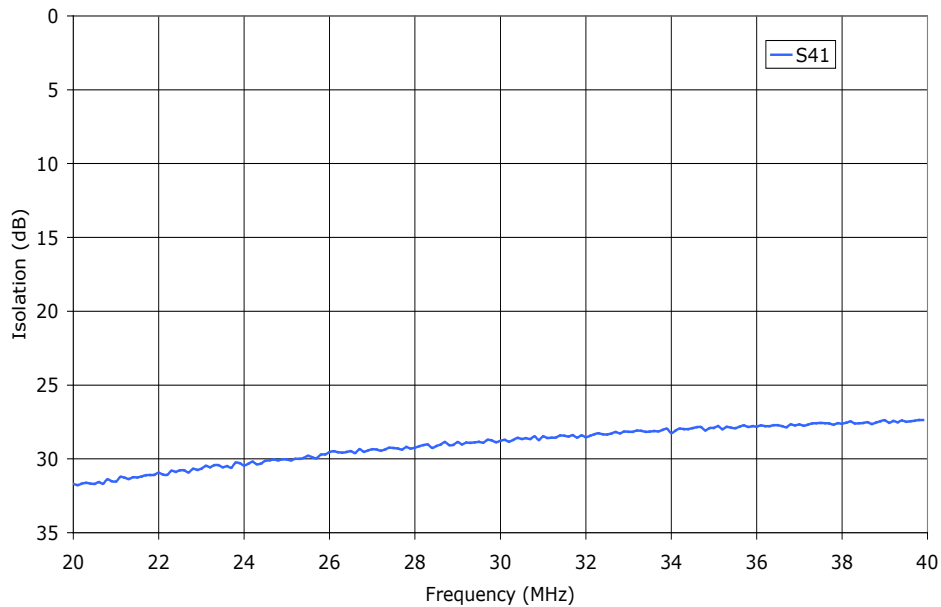
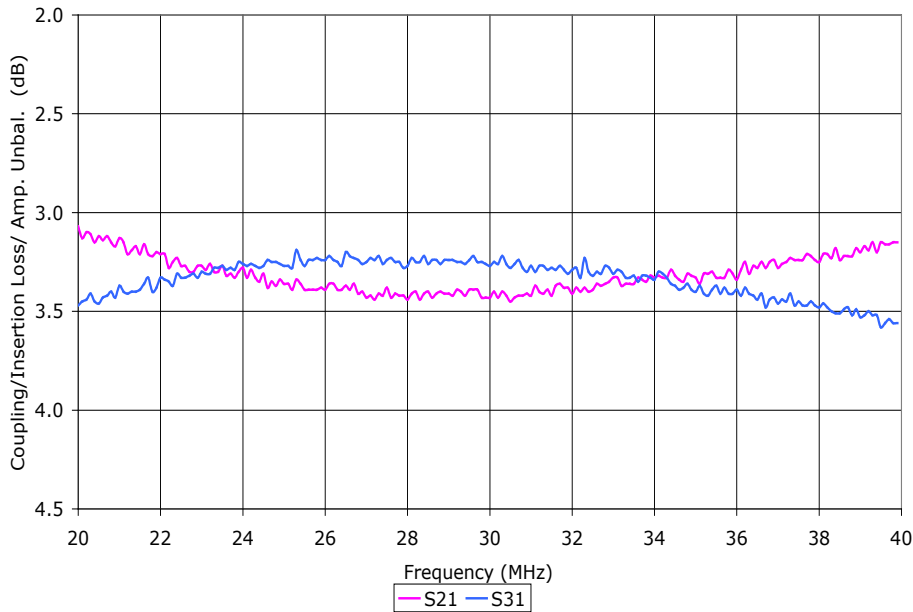
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Data @ 25°C



PERFORMANCE PLOTS

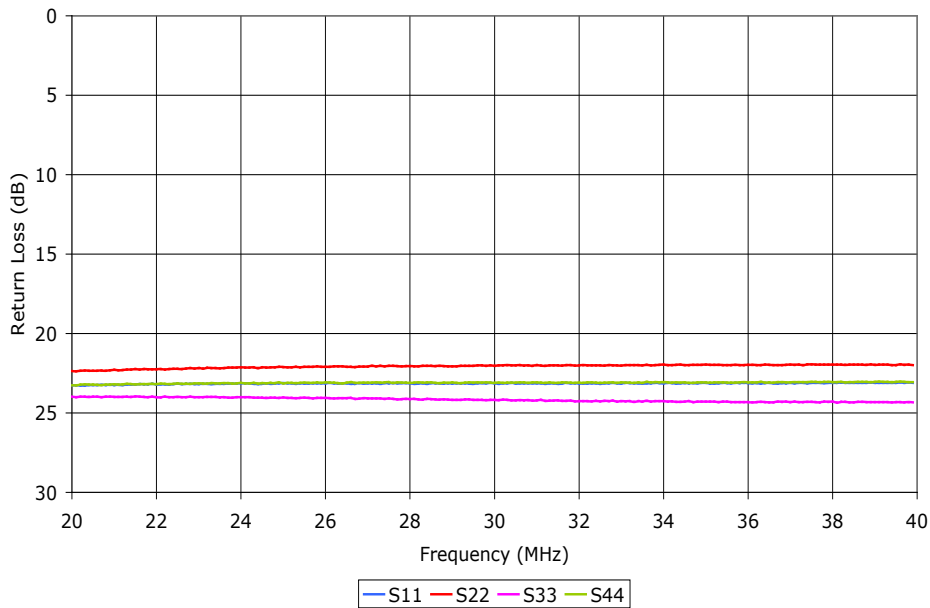
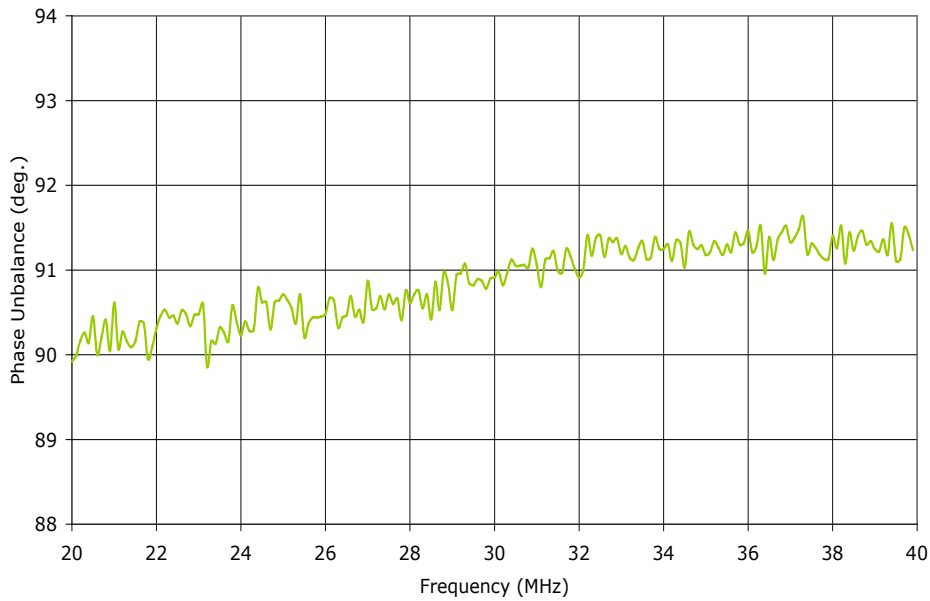
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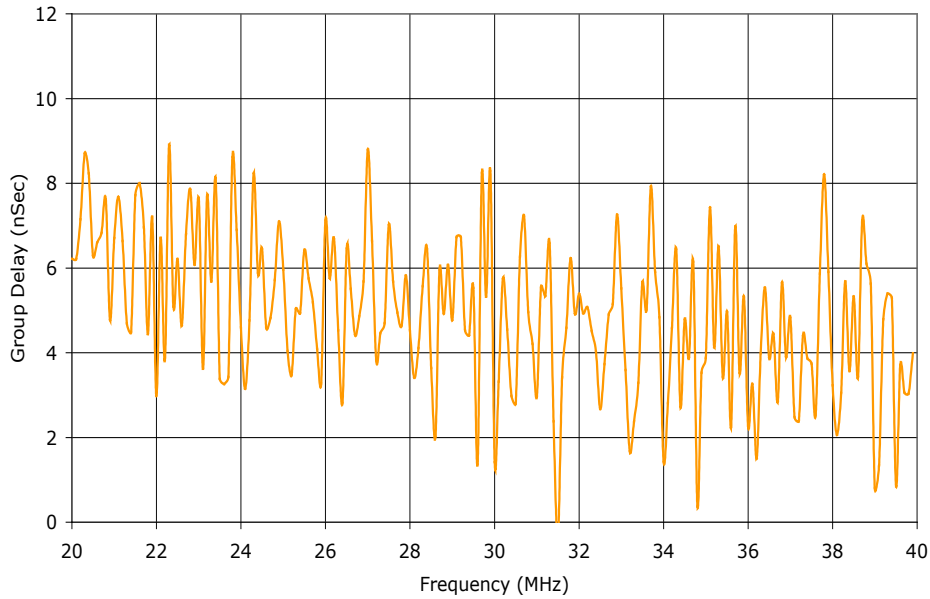
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