

90° HYBRID

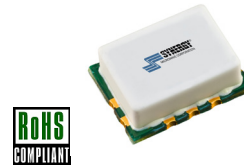
SURFACE MOUNT MODEL: SMQ-C05

OCTAVE BANDWIDTH

150 - 300 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. F 05/21/24)

Frequency	150 - 300 MHz	
Insertion Loss (dB) *	Typ.	Max.
	0.4	0.75
Amplitude Unbalance	Typ.	Max.
	0.5	1.0
Phase Unbalance	Typ.	Max.
	2°	4°
Isolation (dB)	Typ.	Min.
	25	18
Power Rating	1 Watt (Max.)	
Impedance	50 Ohms (Nom.)	
VSWR	1.1:1 (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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TOP VIEW

BOTTOM VIEW

RECOMMENDED PCB LAYOUT

DETAIL - A

PACKAGE MOUNTING: SEE APPLICATION NOTE AN7301.
 TOLERANCES ON THREE DIMENSIONS ARE IN INCHES.
 DECIMAL PLACES = ± 0.015

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

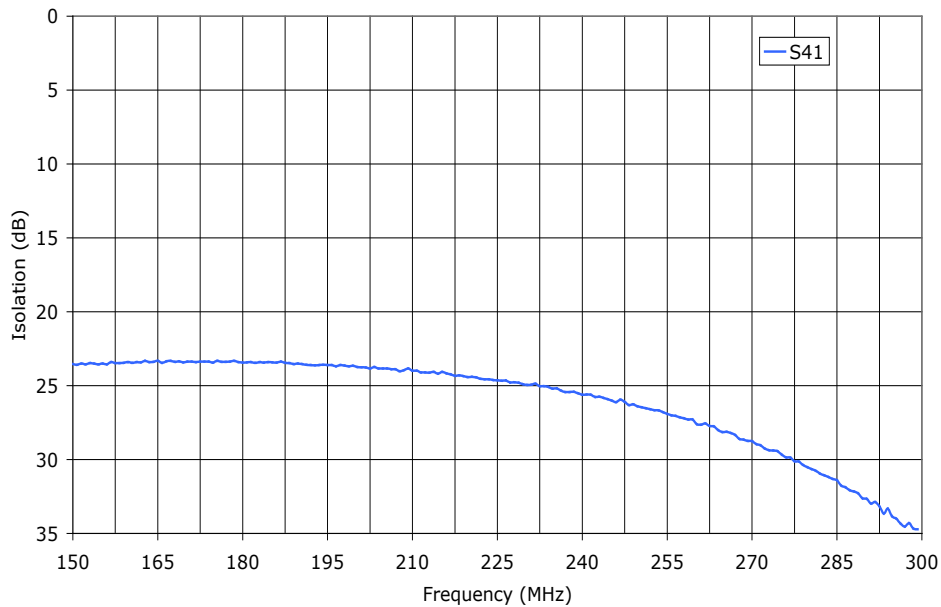
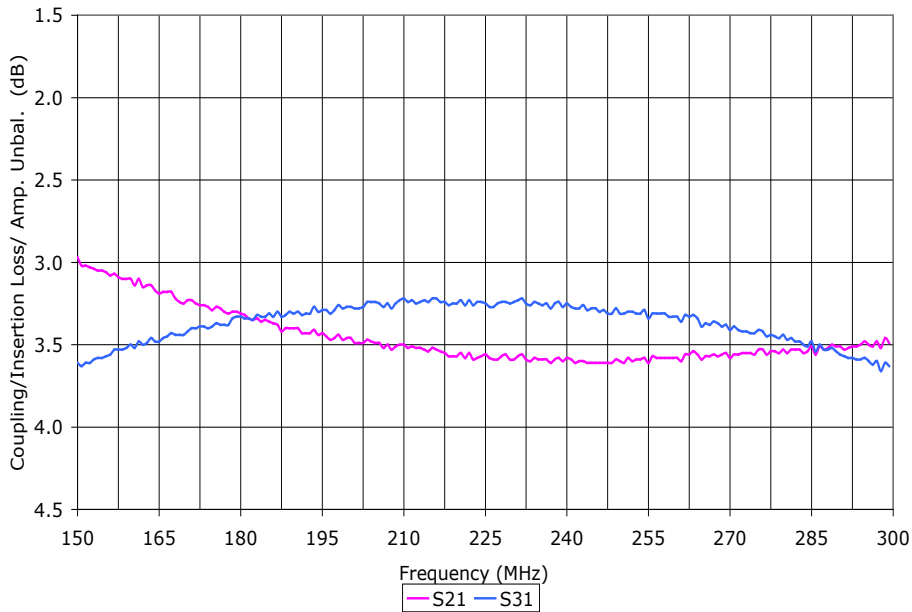
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PERFORMANCE PLOTS

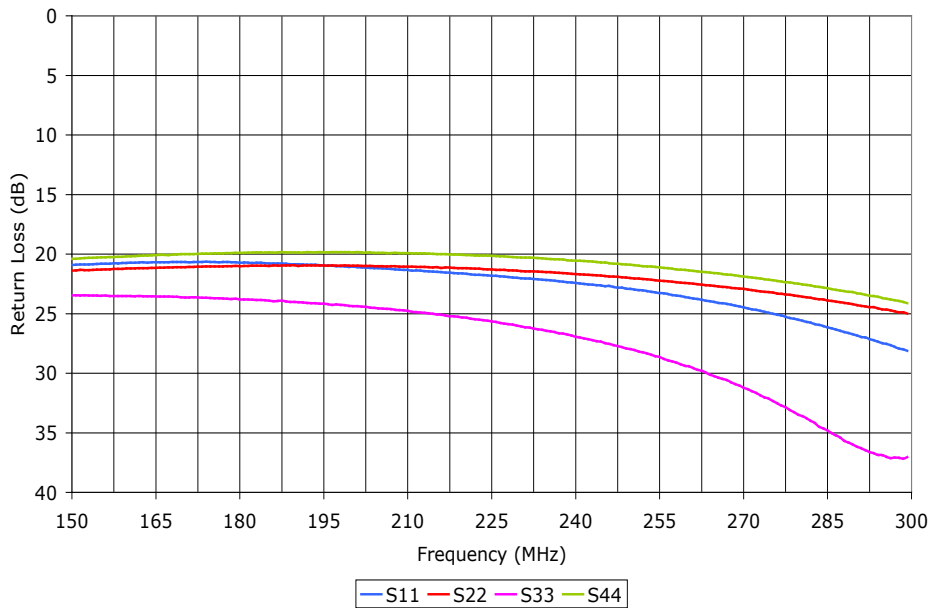
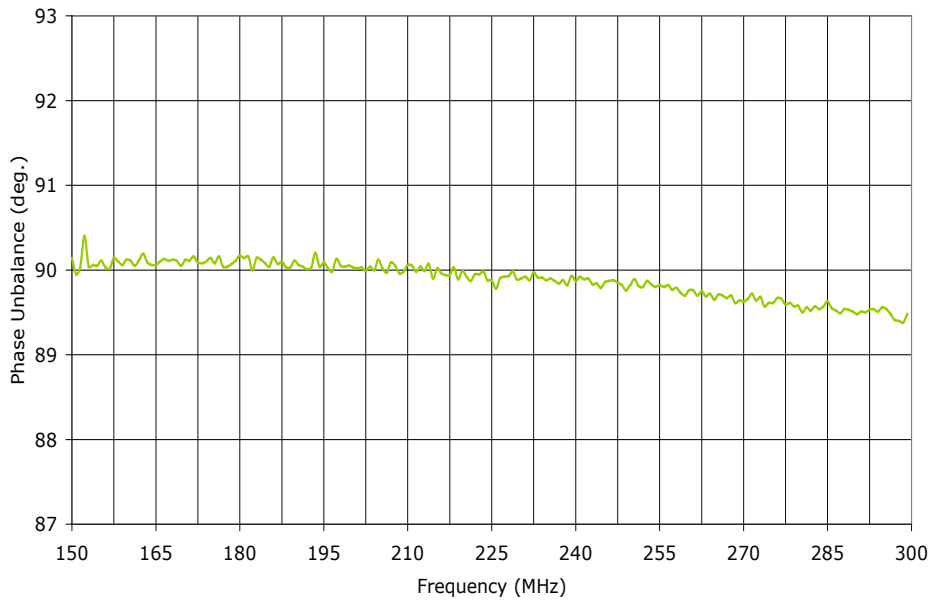
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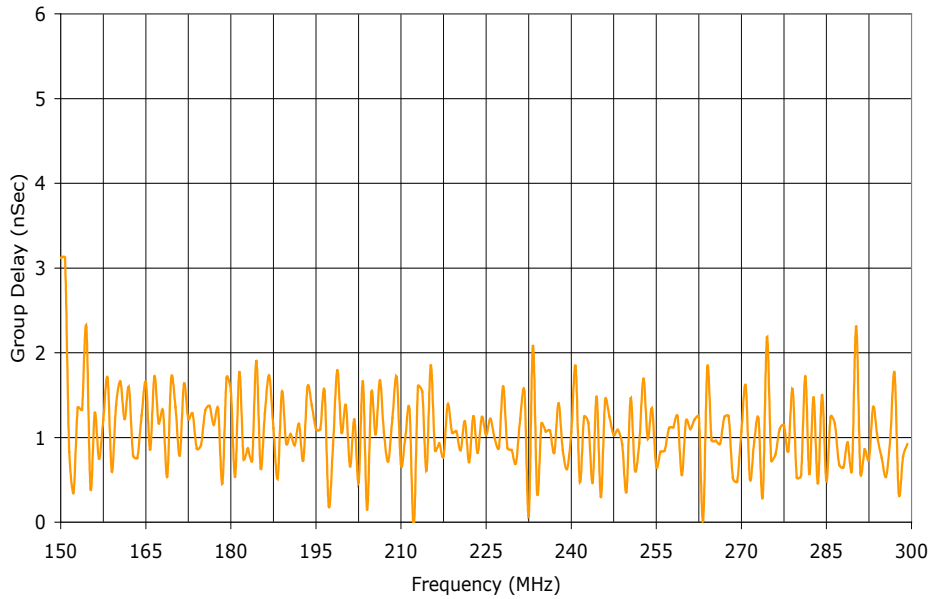
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