

90° HYBRID

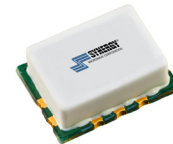
SURFACE MOUNT MODEL: SMQ-C23

OPTIMIZED BANDWIDTH

55 - 90 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. B 06/20/22)

Frequency	55 - 90 MHz	
Insertion Loss (dB) *	Typ.	Max.
	0.3	0.7
Amplitude Unbalance	Typ.	Max.
	0.3	0.9
Phase Unbalance (Deg.)	Typ.	Max.
	0.5°	3.0°
Isolation (dB)	Typ.	Min.
	30	17
Power Rating	1 Watt (Max.)	
Impedance	50 Ohms (Nom.)	
VSWR	1.2:1 (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

DETAIL - A

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

Pin Configuration					
Input	Isolated*	+90° Output	0° Output	GND.	No Connection
5	6	1	2	7,8,9,10	3,4

* Terminate ISOLATED port in 50 Ohms EXTERNALLY.

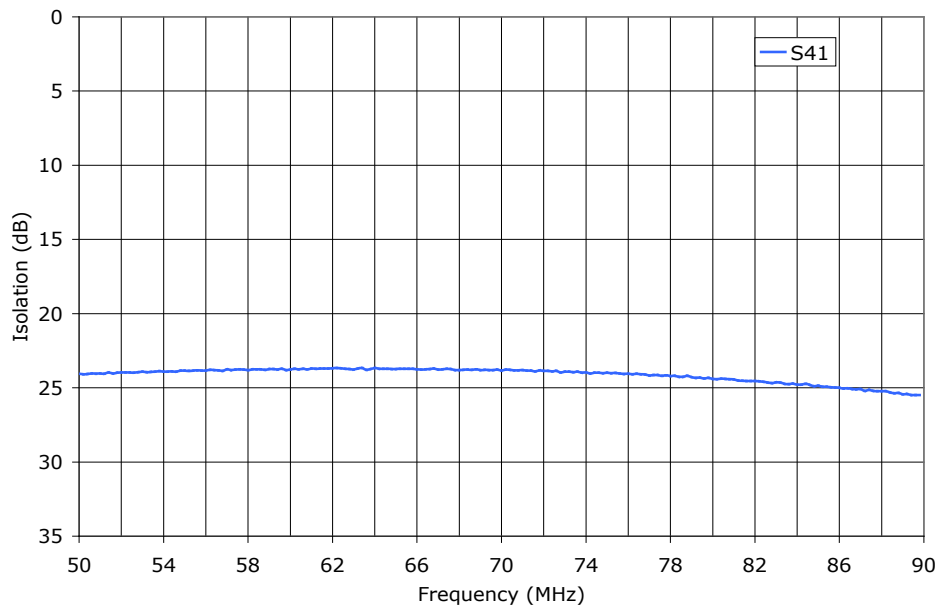
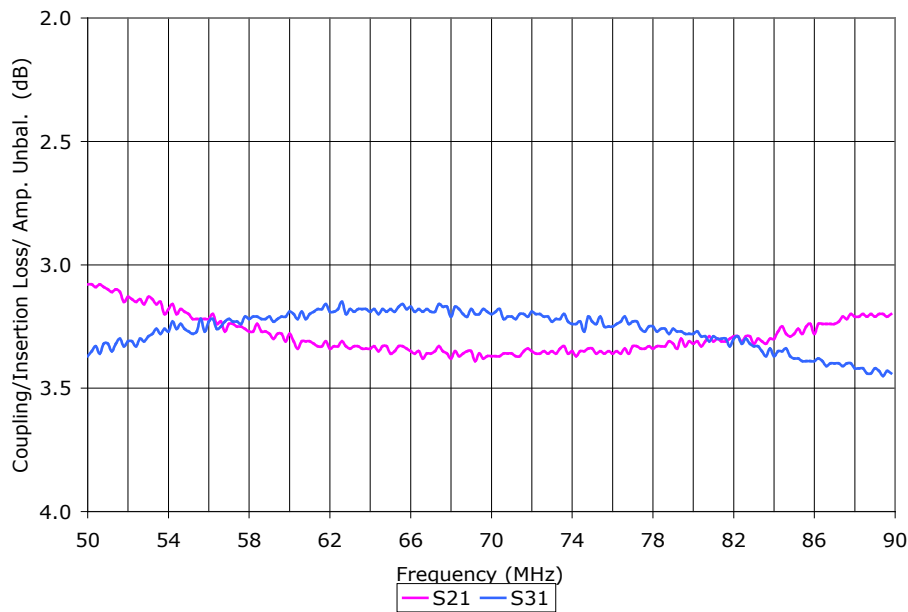
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Data @ 25°C



PERFORMANCE PLOTS

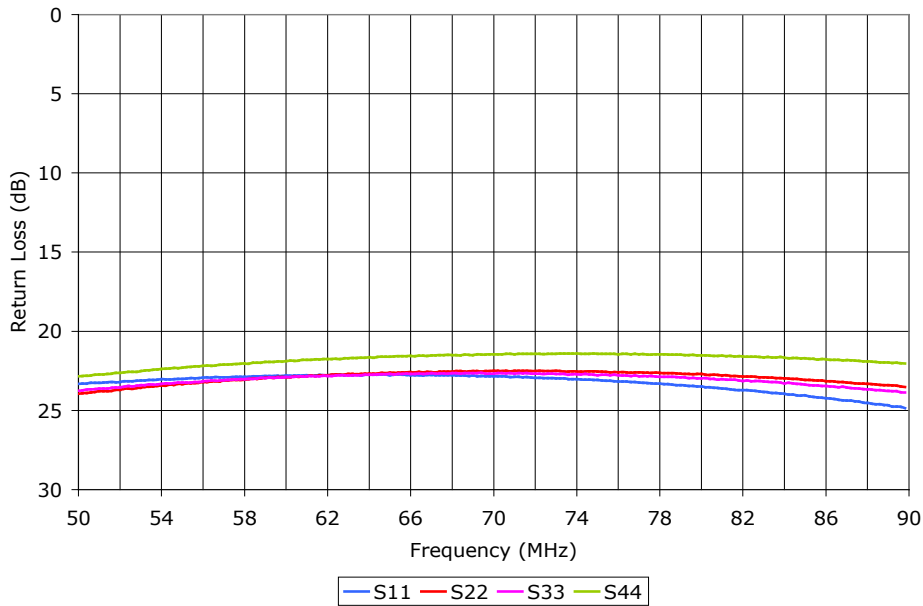
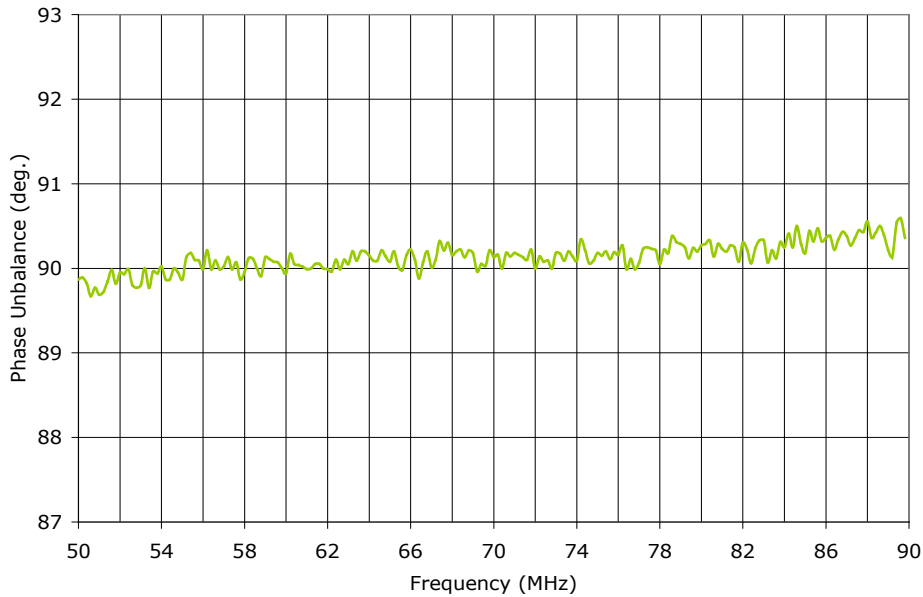
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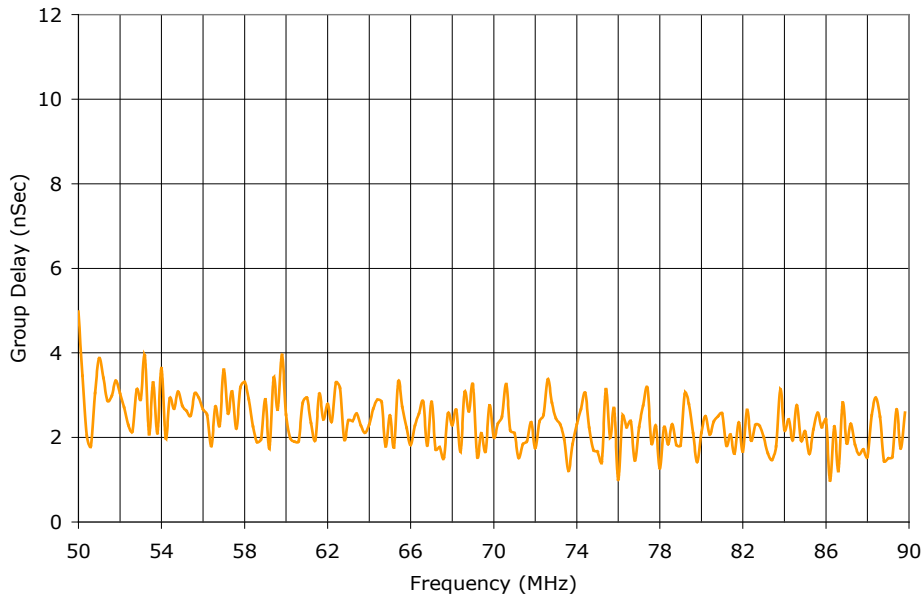
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