

90° HYBRID

SURFACE MOUNT MODEL: SMQ-C03

2:1 BANDWIDTH

80 - 160 MHz

FEATURES:

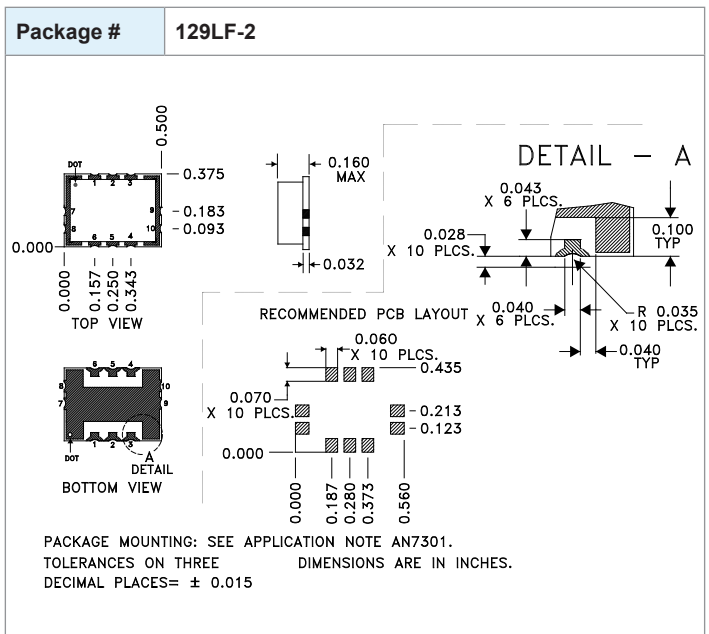
- ▶ Excellent Performance
- ▶ Small Size, Surface Mount
- ▶ Building Block For:
 - Power Amplifiers
 - Image Rejection Mixers
 - I & Q / SSB Modulators
 - Phase Shifters & More...



SPECIFICATIONS (Rev. C 06/20/22)

Frequency	80 - 160 MHz	
Insertion Loss (dB) *	Typ.	Max.
	0.2	0.5
Amplitude Unbalance	Typ.	Max.
	0.4	1.0
Phase Unbalance	Typ.	Max.
	1°	3°
Isolation (dB)	Typ.	Min.
	28	18
Power Rating	1 Watt (Max.)	
Impedance	50 Ohms (Nom.)	
VSWR	1.08:1 (Typ.)	
Operating Temperature Range	-40 to +85 °C	
Storage Temperature Range	-55 to +100 °C	

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



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

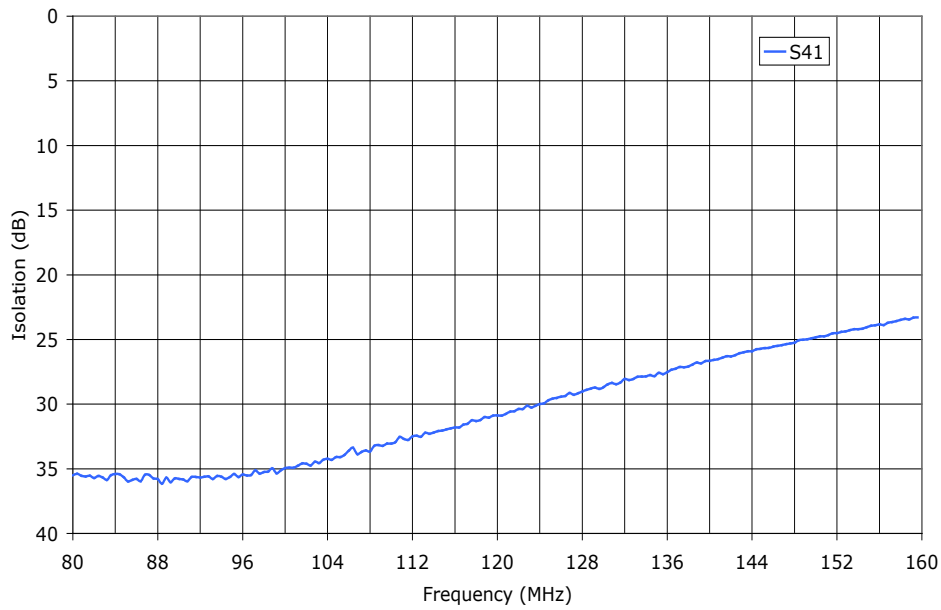
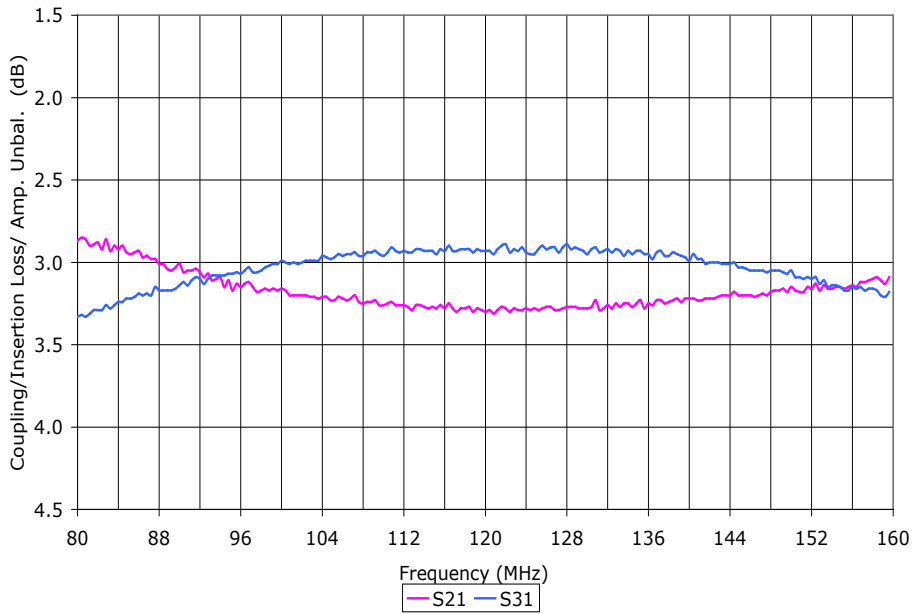
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Data @ 25°C



PERFORMANCE PLOTS

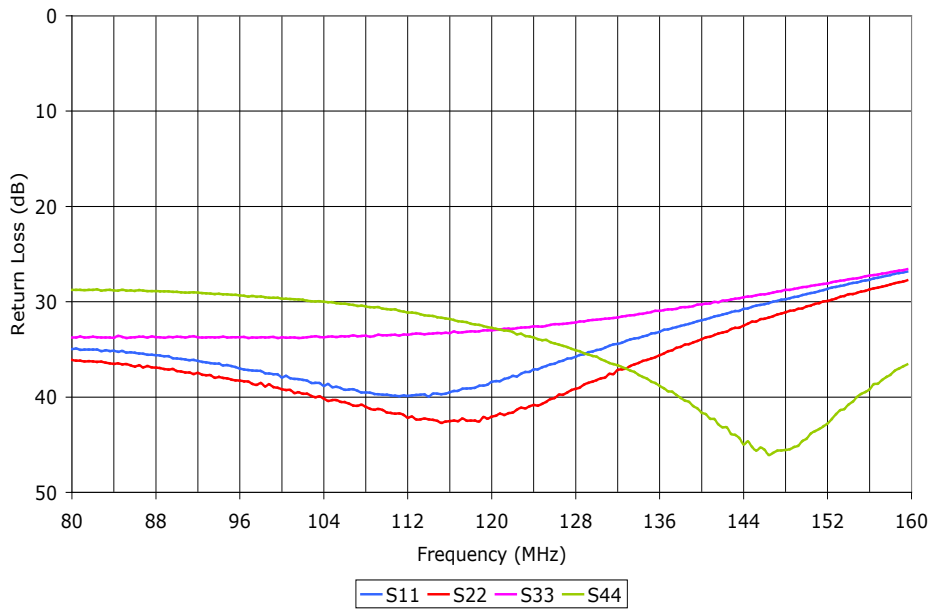
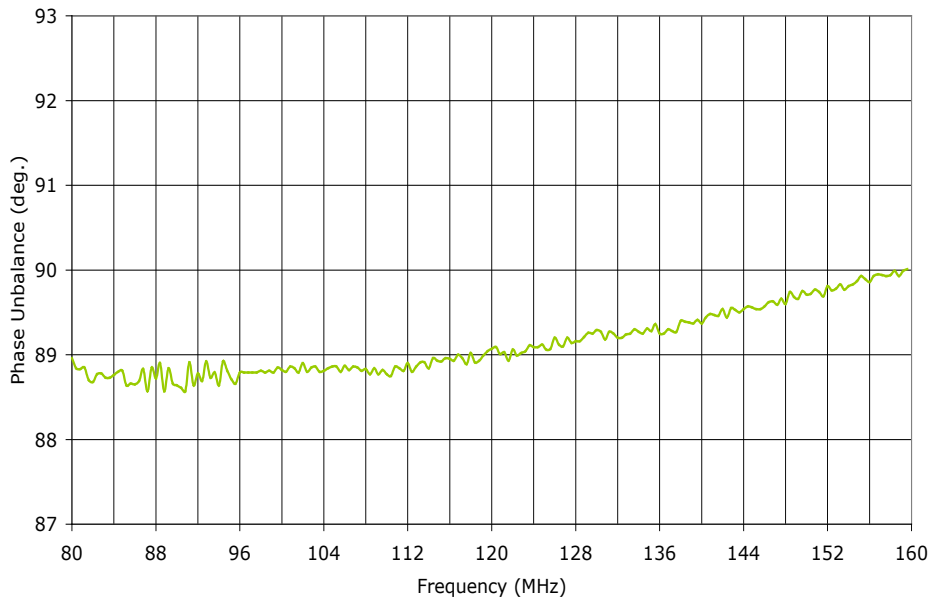
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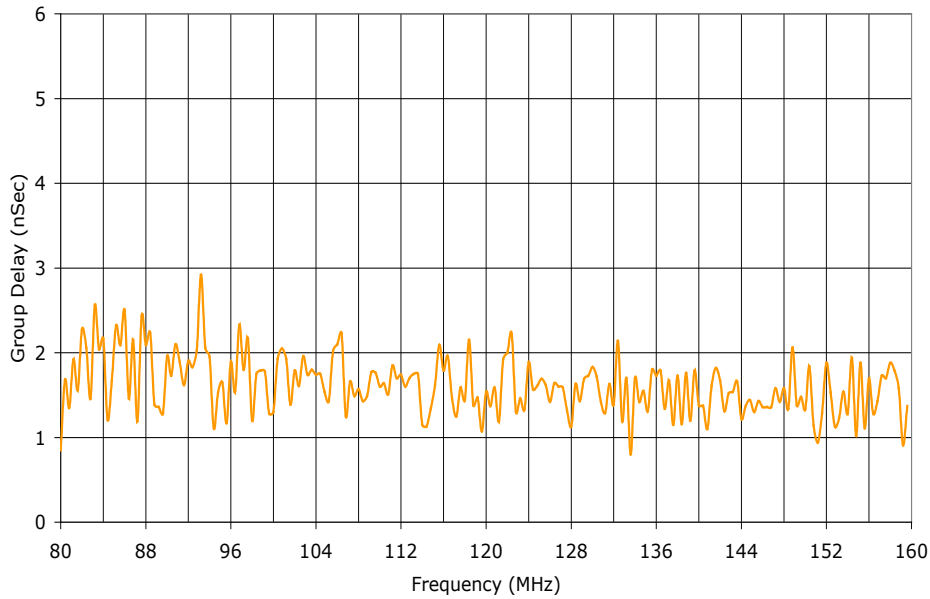
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