

90° HYBRID

SURFACE MOUNT MODEL: SMQ-C10

OCTAVE BANDWIDTH

50 - 100 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 05/21/24)

Frequency	50 - 100 MHz	
Insertion Loss (dB) *	Typ.	Max.
	0.5	0.8
Amplitude Unbalance	Typ.	Max.
	0.4	0.75
Phase Unbalance	Typ.	Max.
	1.0°	3°
Isolation (dB)	Typ.	Min.
	23	17
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																						
PACKAGE MOUNTING: SEE APPLICATION NOTE AN7301. TOLERANCES ON THREE DECIMAL PLACES= ± 0.015																							
<table><tr><th colspan="6">Port Configuration</th></tr><tr><th>Input</th><th>Isolated*</th><th>+90° Output</th><th>0° Output</th><th>GND.**</th><th>No Conn.</th></tr><tr><td>5</td><td>6</td><td>1</td><td>2</td><td>7,8,9,10</td><td>3,4</td></tr></table> * Terminate ISOLATED port in 50 Ohms EXTERNALLY. ** Ground Externally						Port Configuration						Input	Isolated*	+90° Output	0° Output	GND.**	No Conn.	5	6	1	2	7,8,9,10	3,4
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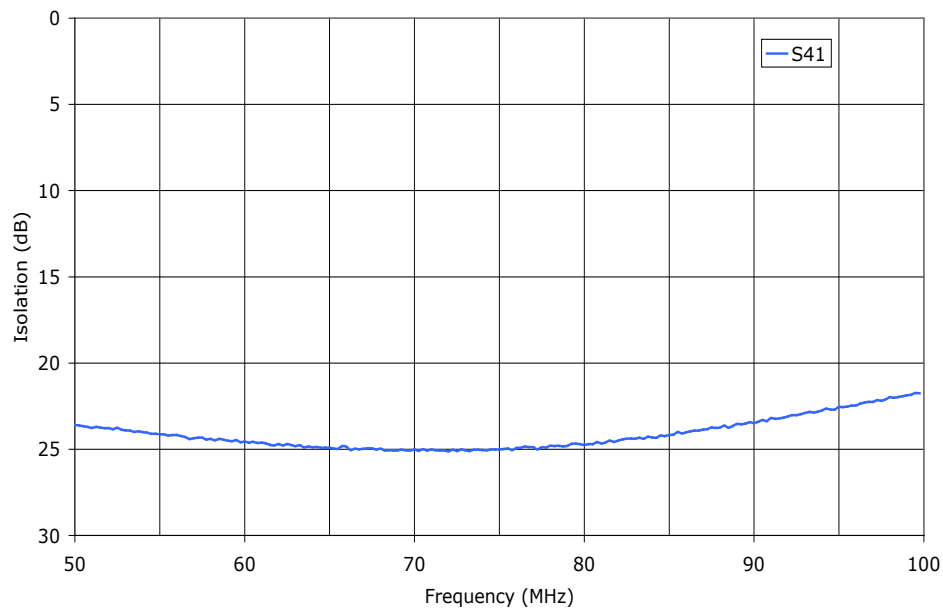
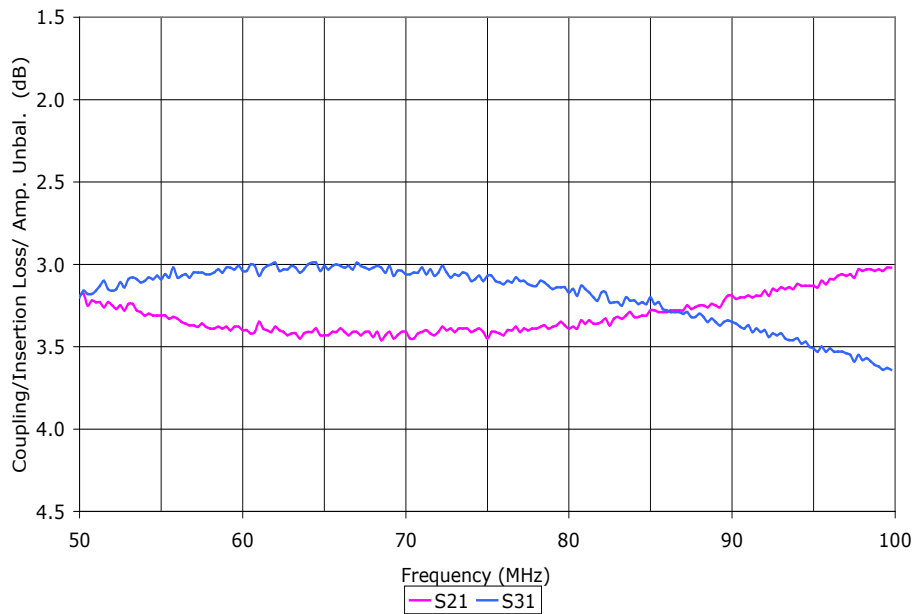
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PERFORMANCE PLOTS

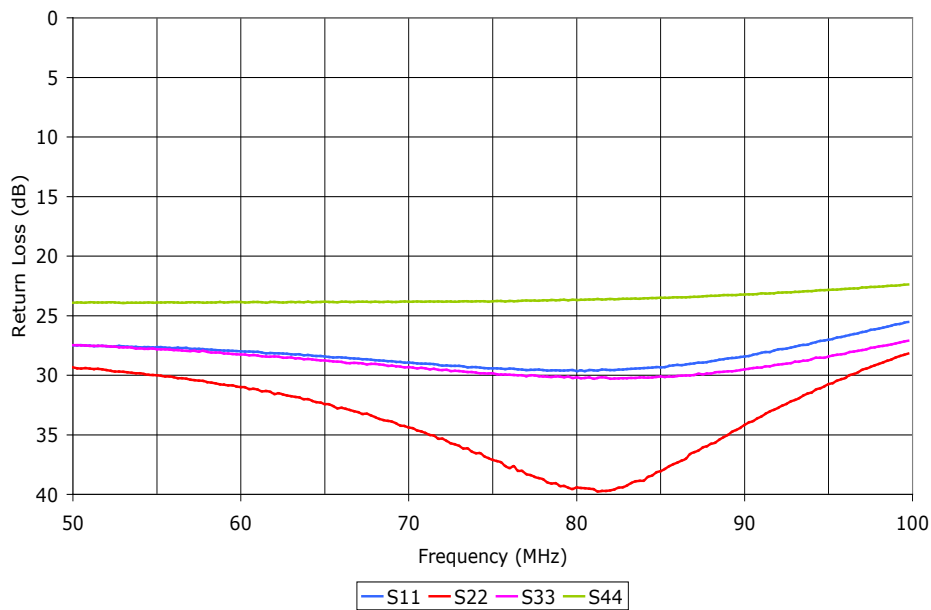
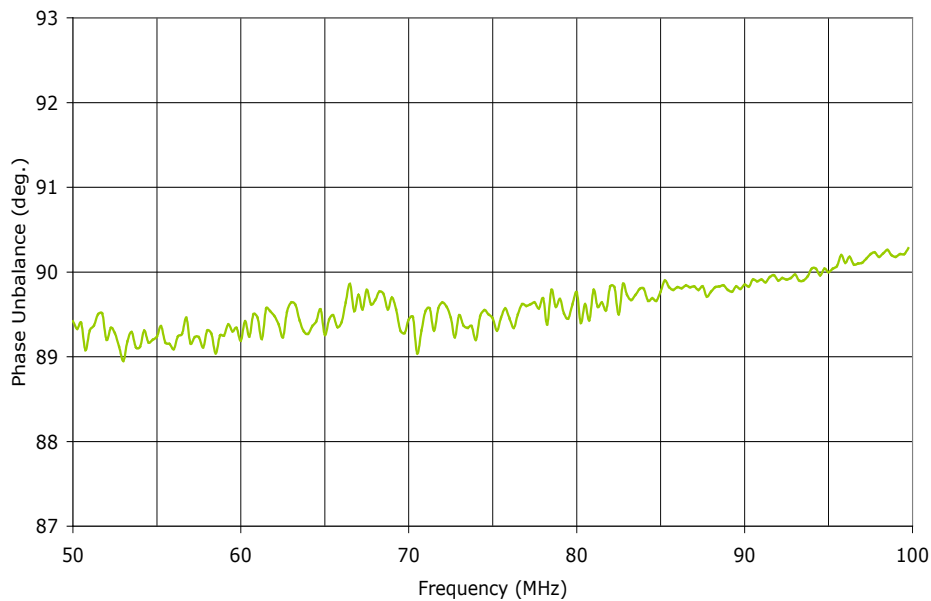
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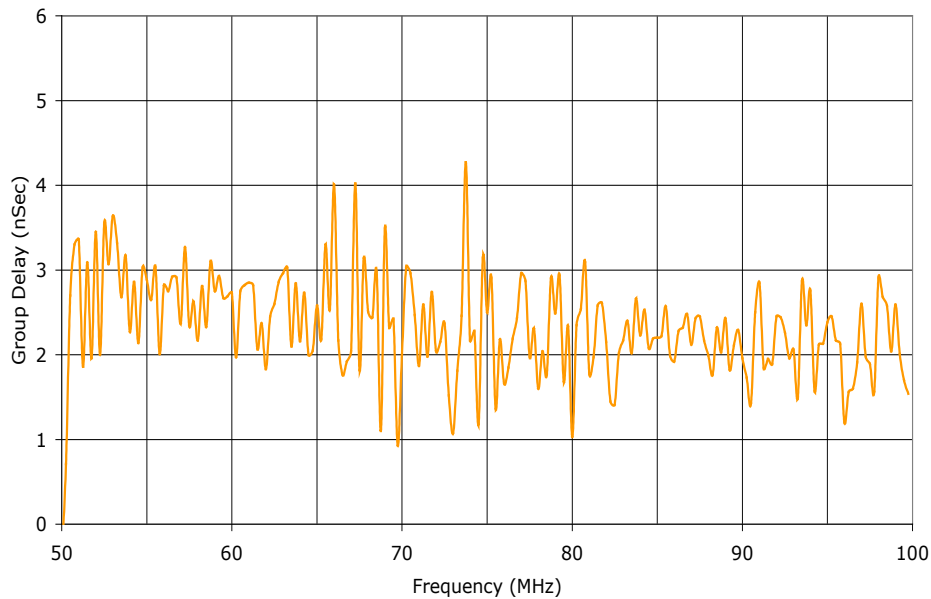
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