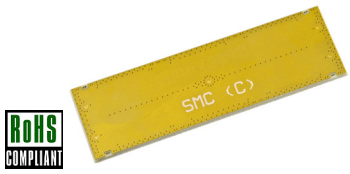
90º HYBRID

SURFACE MOUNT MODEL: MSQ100800

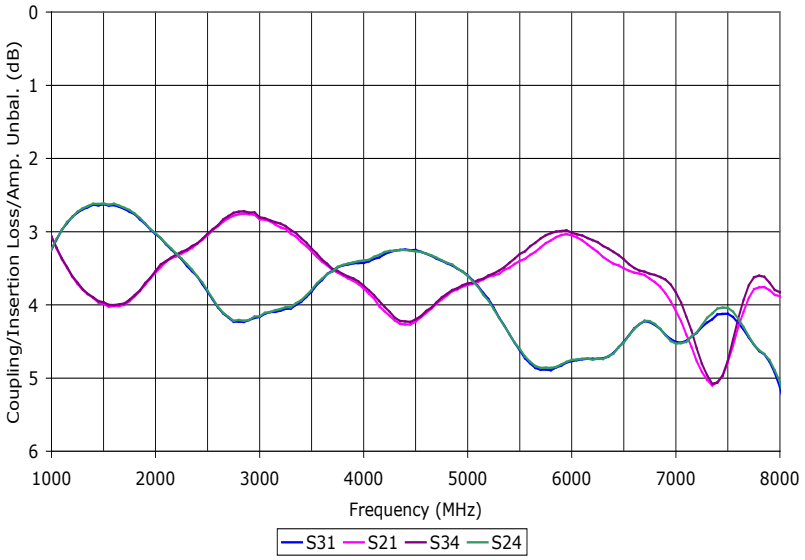
WIDE BANDWIDTH — 1000 - 8000 MHz

FEATURES:

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



RoHS COMPLIANT



SPECIFICATIONS (Rev. B 05/29/13)

Frequency	1000 - 8000 MHz
Insertion Loss (dB) *	Frequency (MHz) / Typ. / Max. 1000-4000 / 0.5 / 1 4000-8000 / 1.5 / 2
Amplitude Unbalance (dB)	Frequency (MHz) / Typ. / Min. 1000-4000 / 1.5 / 2 4000-8000 / 1.8 / 2.2
Phase Unbalance (Deg.)	Frequency (MHz) / Typ. / Min. 1000-4000 / 2 / 4 4000-8000 / 6 / 12

Isolation (dB)	Frequency (MHz) / Typ. / Min. 1000-4000 / 18 / 15 4000-8000 / 14 / 10
Power Rating	50 Watts Ave. (CW)
Impedance	50 Ohms (Nom.)
VSWR	Frequency (MHz) / Typ. 1000-4000 / 1.30:1 4000-8000 / 1.75:1
Operating Temperature Range	-55 to +85 °C
Storage Temperature Range	-55 to +100 °C

** Insertion loss in excess of the theoretical 3 dB coupling and is measured at the midpoint of the two output levels.*

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E-Mail: sales@synergymwave.com • World Wide Web: http://www.synergymwave.com

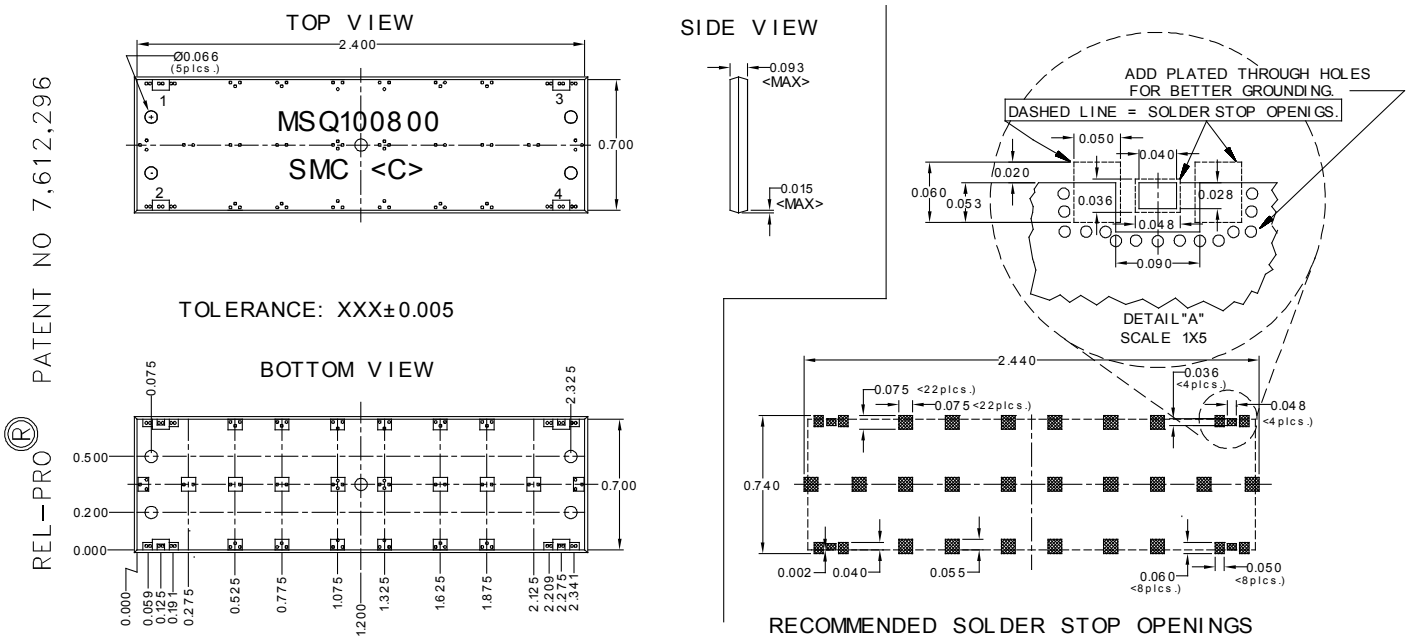
SYNERGY® MICROWAVE CORPORATION

90º HYBRID

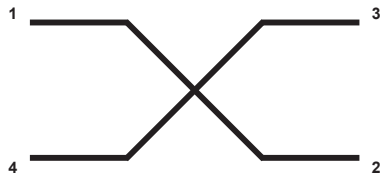
SURFACE MOUNT MODEL: MSQ100800

WIDE BANDWIDTH 1000 - 8000 MHz

Package #	346



PORT DIAGRAM



PHASING DIAGRAM

OUT / IN	1	2	3	4
1		0º	ISO	+90º
2	0º		+90º	ISO
3	ISO	+90º		0º
4	+90º	ISO	0º	

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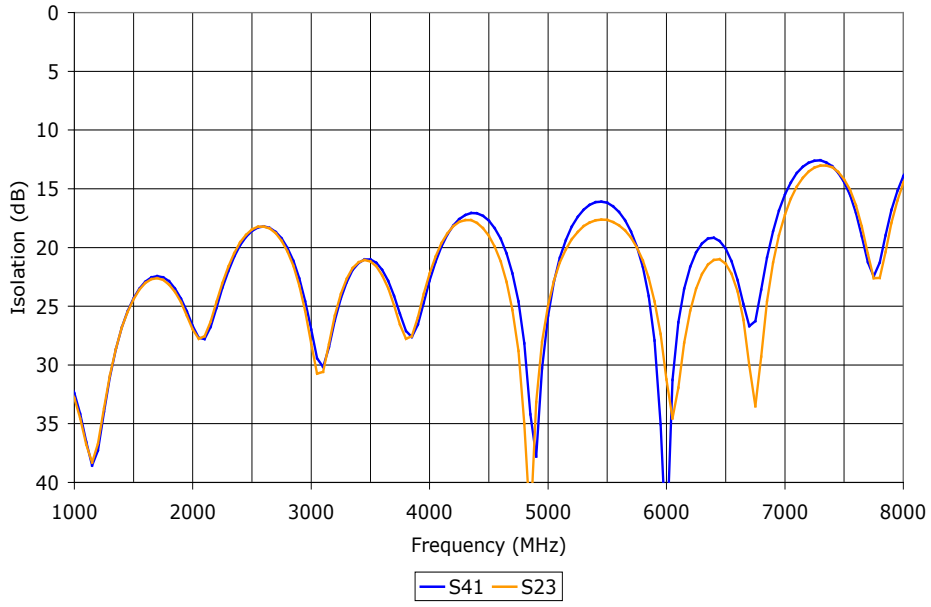
90º HYBRID

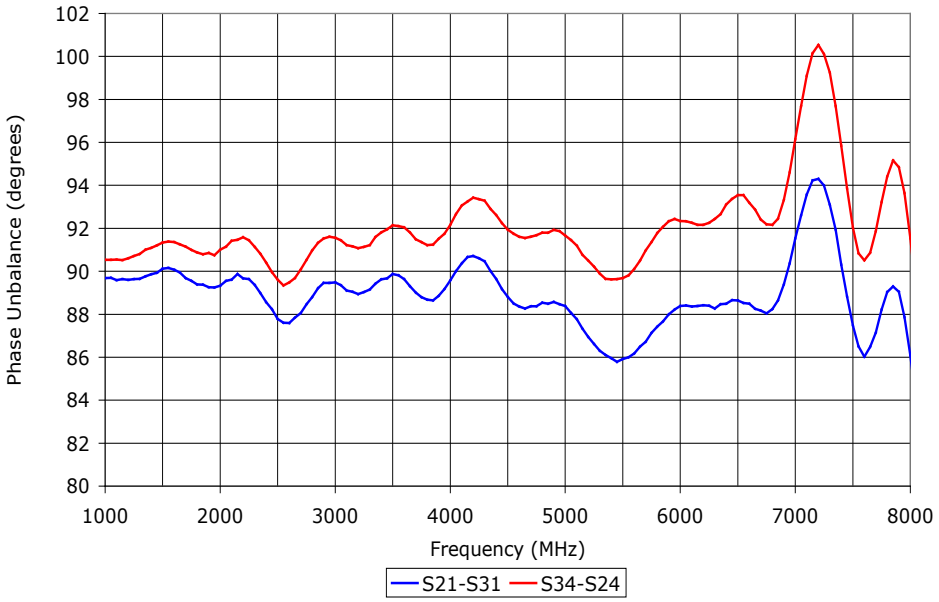
SURFACE MOUNT MODEL: MSQ100800

WIDE BANDWIDTH 1000 - 8000 MHz

PERFORMANCE PLOTS

Data @ 25ºC





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90º HYBRID

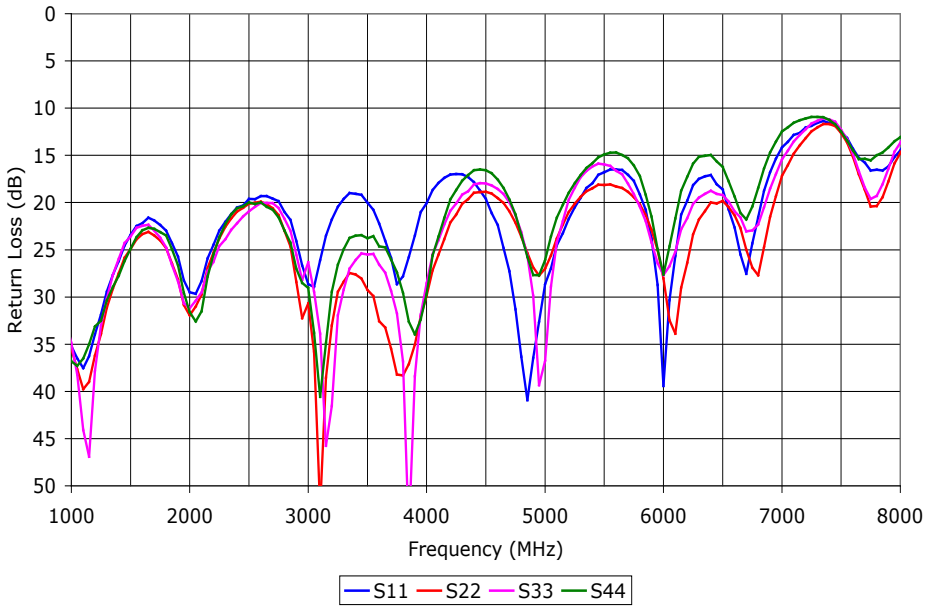
SURFACE MOUNT MODEL: MSQ100800

WIDE BANDWIDTH

1000 - 8000 MHz

PERFORMANCE PLOTS

Data @ 25ºC



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