

90° HYBRID

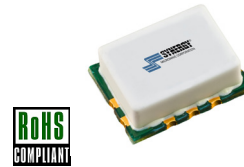
SURFACE MOUNT MODEL: SMQ-C22

OPTIMIZED BANDWIDTH

60 - 80 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. D 05/21/24)

| | | |
|-----------------------------|----------------|------|
| Frequency | 60 - 80 MHz | |
| Insertion Loss (dB) * | Typ. | Max. |
| | 0.2 | 0.6 |
| Amplitude Unbalance | Typ. | Max. |
| | 0.1 | 0.6 |
| Phase Unbalance (Deg.) | Typ. | Max. |
| | 2.0° | 3.0° |
| Isolation (dB) | Typ. | Min. |
| | 27 | 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 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.

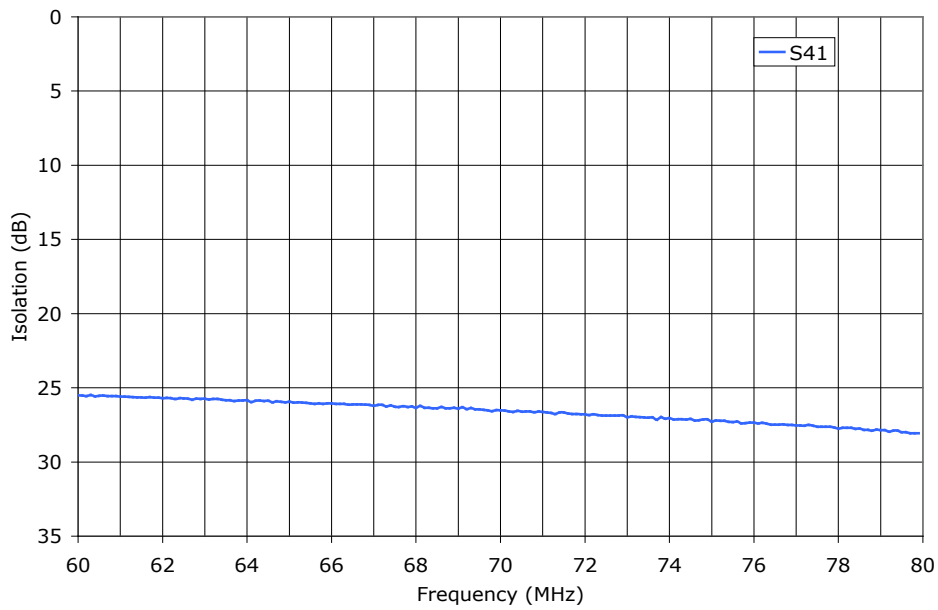
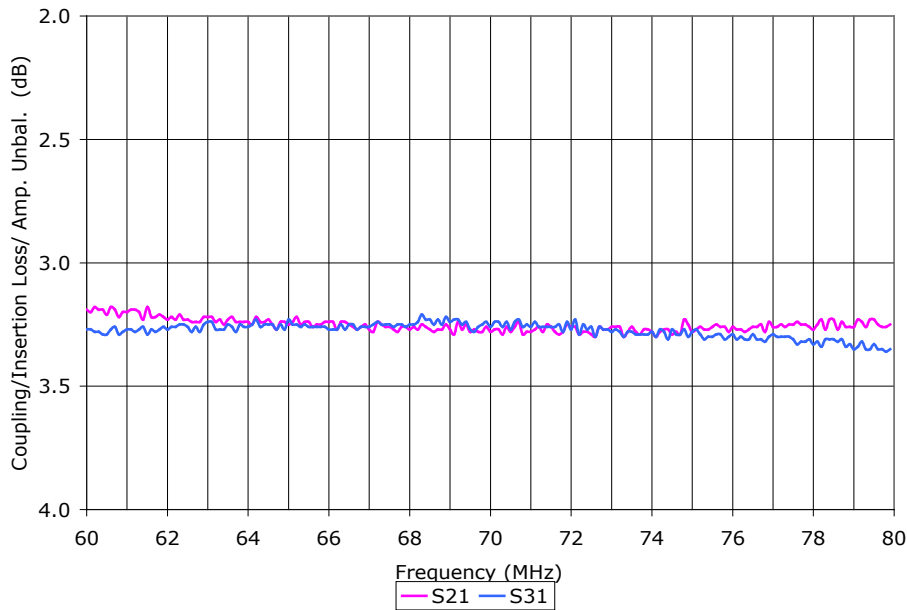
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Data @ 25°C



PERFORMANCE PLOTS

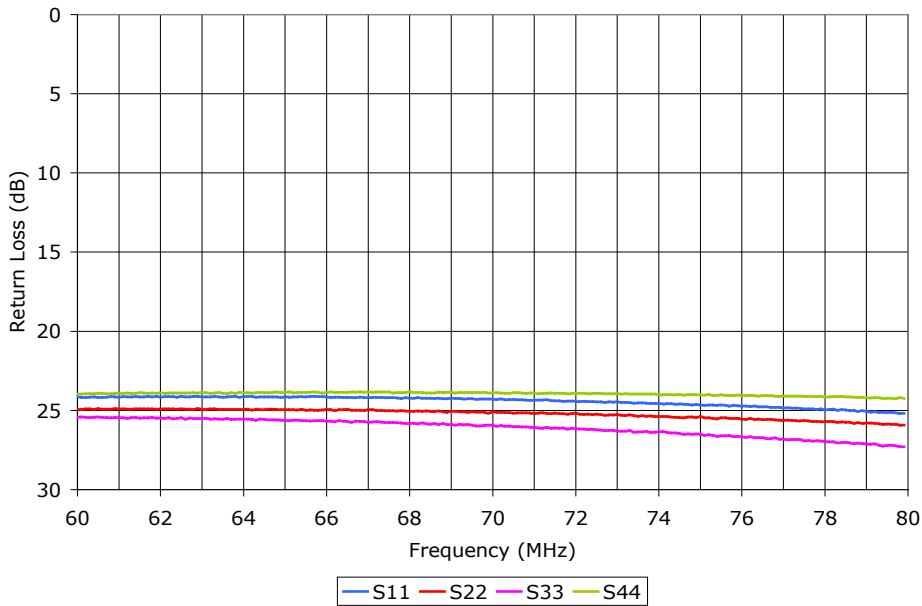
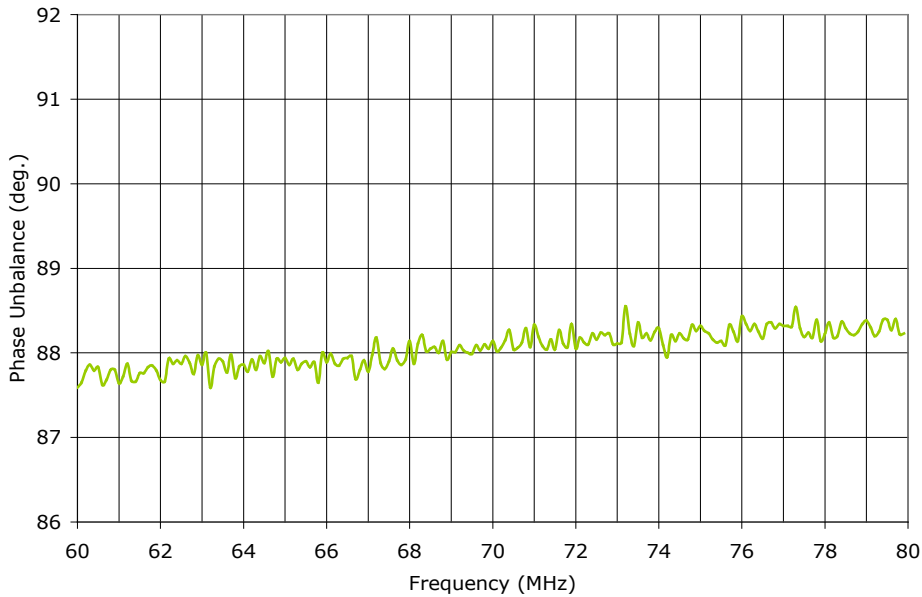
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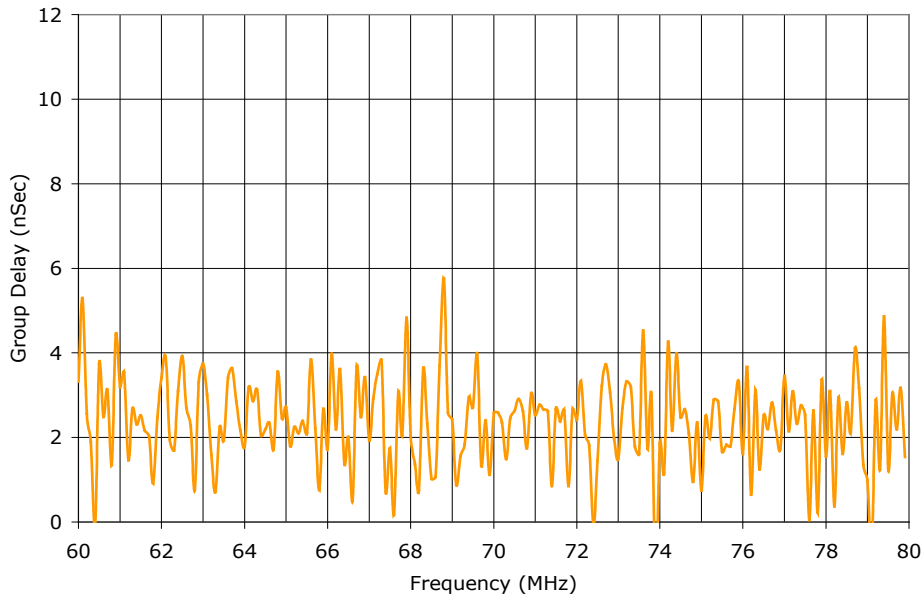
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