

# QUAD HYBRID - QHD-2Z-2.45G SQ

## TECHNICAL FEATURE

### FEATURES

- 2.3 - 2.7 GHz
- Low Loss
- Space Qualified
- Low VSWR
- Multiple Plating Options
- Surface Mount
- High Power - 25 Watts CW
- Tape & Reel



### PERFORMANCE

Frequency Range.....	2.3 - 2.7 GHz
Isolation.....	20 dB min.
Insertion Loss.....	0.35 dB max.
VSWR.....	1.35:1 max.
Amplitude Balance.....	±0.3 dB max.
Phase Balance.....	90 ± 3° max.
Input Power.....	25 watts max.
Size.....	0.175 x 0.175 x 0.086 inches
Weight.....	0.003 oz.
RF Interface.....	Surface mount
Operating Temperature Range.....	-55 to +85°C

### DESCRIPTION

The Multi-Mix PICO® QHD series provides a 3 dB, quadrature coupler with low insertion loss, high isolation, and high power handling in a small outline. Accurate phase and amplitude balance make them ideal for applications involving IQ networks, power amplifiers, signal distribution and processing.

The QHD series is an easy to install SMD designed specifically for the full spectrum of wireless applications. The high stability ceramic filled PTFE dielectrics utilized in these components are compatible with common substrates such as FR-4, G-10, and polyamide. The wrap around ground plane provides excellent EM shielding.

Parts, materials and processes are in accordance with Merrimac document CENG-0001 "Standard Design Requirements for Space Qualified Devices".

## PACKAGE OUTLINE / TAPE & REEL ORIENTATION

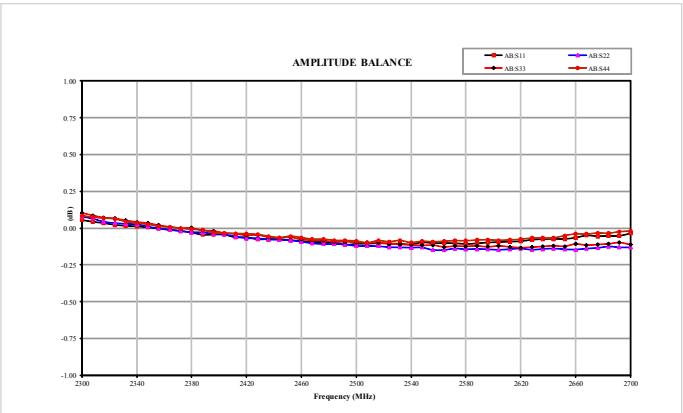
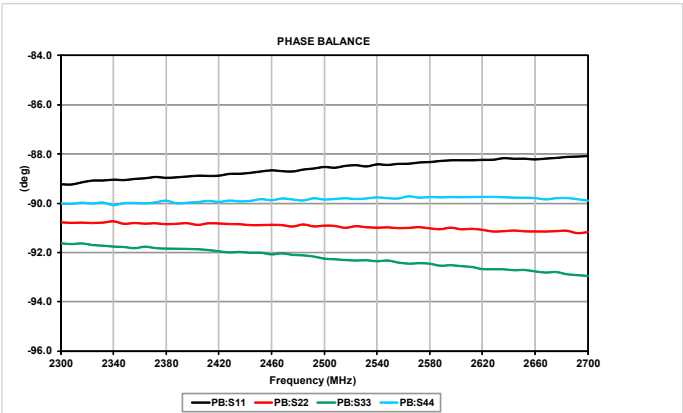
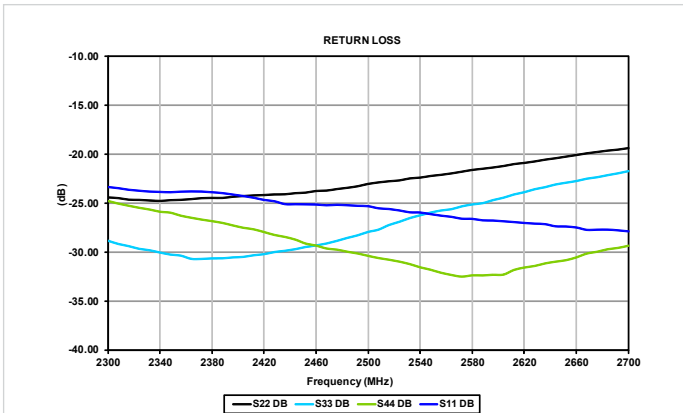
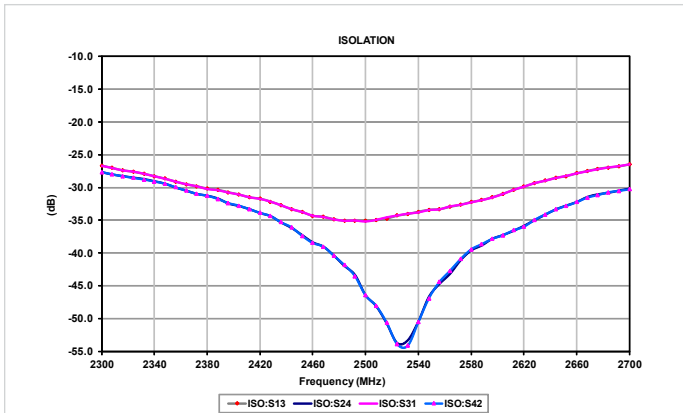
NOTES:  
1. ALL DIMENSIONS ARE IN INCHES.  
2. TOLERANCES: -3 PLACE DECIMALS; ±.005.

DIRECTION OF FEED

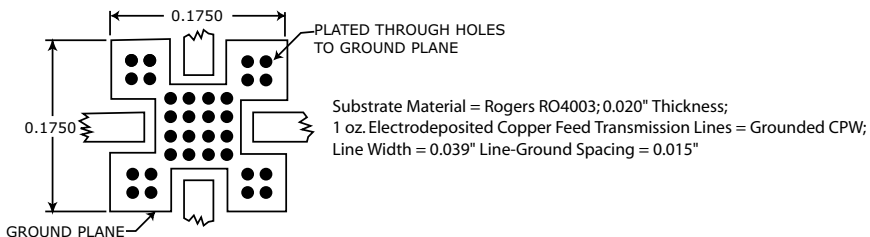
	W	P <sub>1</sub>	P <sub>0</sub>	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>
ENGLISH (in)	0.4724	0.3150	0.1575	0.1949	0.1988	0.1083
METRIC (mm)	12.00	8.00	4.00	4.95	5.05	2.75

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## PERFORMANCE DATA



## MOUNTING GUIDELINES



## TRUTH TABLE

	1	2	3	4
1	Input	0°	Iso	-90°
2	0°	Input	-90°	Iso
3	Iso	-90°	Input	-90°
4	-90°	Iso	0°	Input

DS\_Quad\_QHD2Z245GSQ\_022624.indd. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors. We reserve the right to make changes in products or specifications without notice. Copyright © 2011 Crane Electronics, Inc. All rights reserved.

