

MULTI-Mix
PICO ZAPPER®

QHDZ-2Z-3.5G
QUAD HYBRID

REV: 003, 11/11/05

TECHNICAL DESCRIPTION

MULTI-MIX PICO ZAPPER® Z-SERIES QUAD HYBRIDS

- 3.3 - 3.7 GHz
- HIGH POWER...25 WATTS CW
- LOW LOSS
- LOW VSWR
- SURFACE MOUNT
- TAPE & REEL



RoHS Compliant

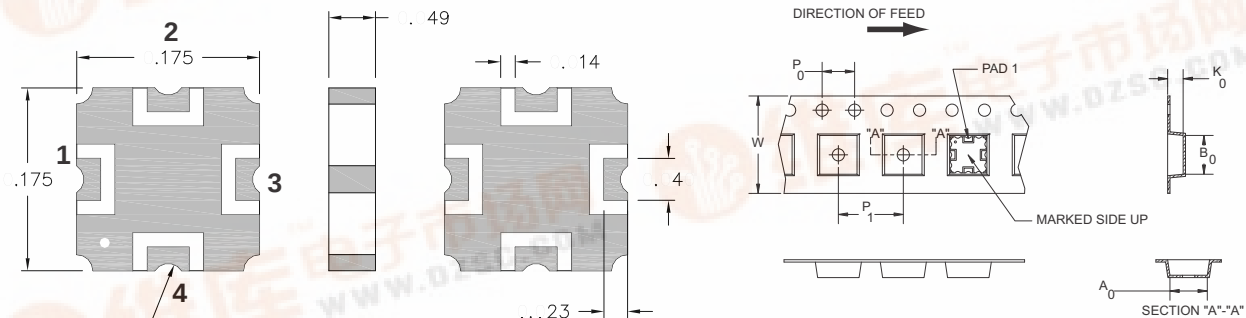
The Multi-Mix® QHDZ-Z series provides a 3 dB, quadrature coupler with low insertion loss, high isolation, and high power handling in a small outline. Accurate phase and amplitude balance make them ideal for applications involving IQ networks, power amplifiers, signal distribution and processing.

The QHDZ-Z 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.

GENERAL SPECIFICATIONS

FREQUENCY RANGE GHz		ISOLATION (dB MIN.)	INSERTION LOSS (dB MAX)	VSWR (MAX.)	AMPLITUDE BALANCE (dB MAX.)
3.3 - 3.7		20	0.30	1.30:1	±0.3
PHASE BALANCE (MAX.)	INPUT POWER (MAX.)	SIZE (INCHES)	WEIGHT (OZ.)	RF INTERFACE	OPERATING TEMPERATURE
90 ± 3°	25 W	0.175 x 0.175 x 0.049	0.003	Surface Mount	-55° - +95° C

PACKAGE OUTLINE / TAPE & REEL ORIENTATION



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

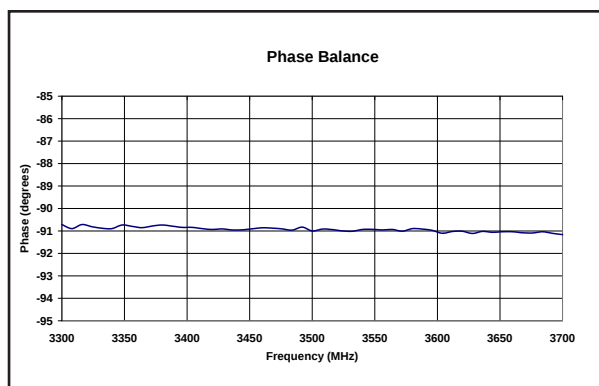
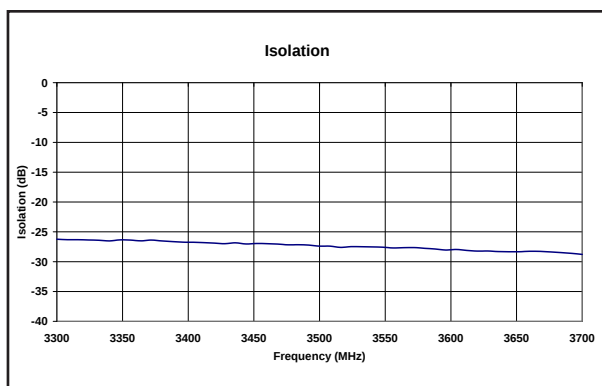
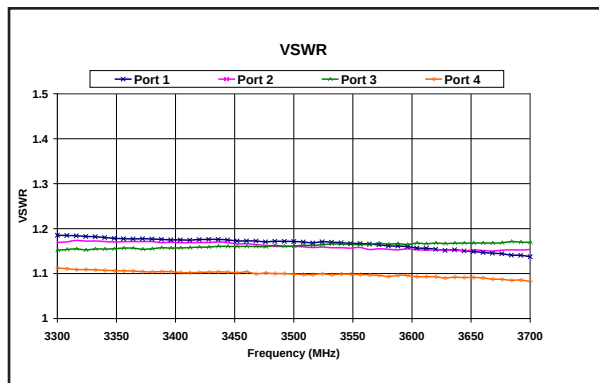
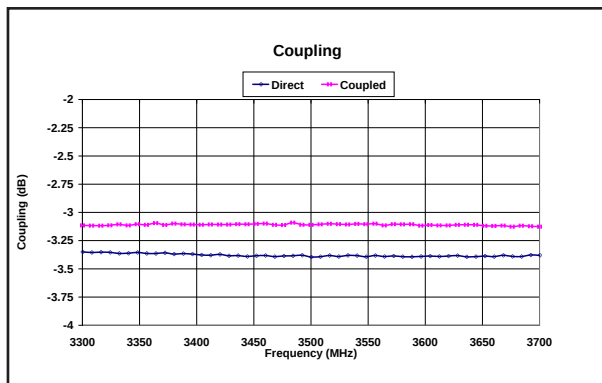
THE MULTI-MIX MICROTECHNOLOGY® GROUP IS ISO 9001:2000 REGISTERED

U.S. Patent 6,099,677 and other Patents Pending.

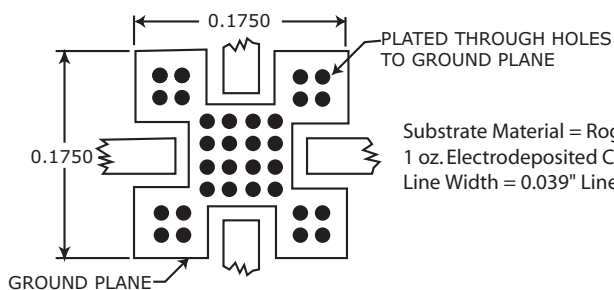
Merrimac Industries / 41 Fairfield Place, West Caldwell, NJ 07006

Tel: 1.888.434.MMFM / Fax: 973.882.5990 / Email: crm@merrimacind.com / www.merrimacind.com

TYPICAL PERFORMANCE



MOUNTING GUIDELINES



Substrate Material = Rogers RO4003; 0.020" Thickness;
 1 oz. Electrodeposited Copper Feed Transmission Lines = Grounded CPW;
 Line Width = 0.039" Line-Ground Spacing = 0.015"

TRUTH TABLE

	1	2	3	4
1	In	0	Isolated	-90
2	0	In	-90	Isolated
3	Isolated	-90	In	0
4	-90	Isolated	0	In

THE MULTI-MIX MICROTECHNOLOGY® GROUP IS ISO 9001:2000 REGISTERED