

**TECHNICAL DESCRIPTION**

**FEATURES**

- 380 - 520 MHz
- LOW LOSS
- HIGH ISOLATION
- EXCELLENT PHASE/AMPLITUDE BALANCE
- HIGH POWER HANDLING
- SURFACE MOUNT

**APPLICATIONS**

- CDMA 450 BASE STATION POWER AMPLIFIERS
- UHF LAND MOBILE RADIO BASE STATION POWER AMPLIFIERS
- UHF RADAR (400-500 MHz)



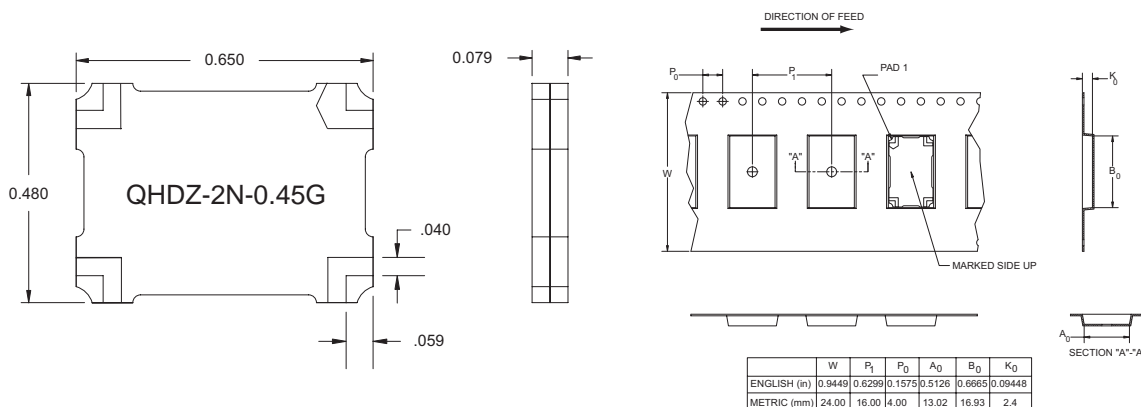
The QHDZ-2N-0.45G series is a member of the Multi-Mix QHDZ family of 3-dB 90° couplers for use in the 380-520 MHz range. The QHDZ-2N-0.45G exhibits low insertion loss, low VSWR, and high isolation. Excellent phase and amplitude balance and high RF power handling capability make this series ideal for use in base station power amplifiers in particular and radio transceivers, receiver/antenna multicouplers and RF signal distribution and processing equipment in general.

The construction of QHDZ quad hybrids is based on fusion bonded multiplayer stripline structures. The fusion bonding process yields homogeneous monolithic dielectric structures with reliability, ruggedness, and electrical and thermal performance that are superior to conventional adhesive bonding techniques.

**GENERAL SPECIFICATIONS**

FREQUENCY RANGE (MHz)		ISOLATION (dB MIN)	INSERTION LOSS (dB MAX)	VSWR (MAX)	AMPLITUDE BALANCE (dB MAX)
410 - 480		23	0.2	1.15:1	±0.15
380- 520		20	0.3	1.20:1	±0.3
PHASE BALANCE (MAX)	INPUT POWER (CW, MAX)	SIZE (INCHES)	WEIGHT (GRAMS/OZ.)	RF INTERFACE	OPERATING TEMPERATURE
90 ± 2° 90 ± 3°	200 W	0.65 x 0.48 x 0.076	2.10 / .074	Surface Mount	-55° - +95° C

**PACKAGE OUTLINE / TAPE & REEL ORIENTATION**

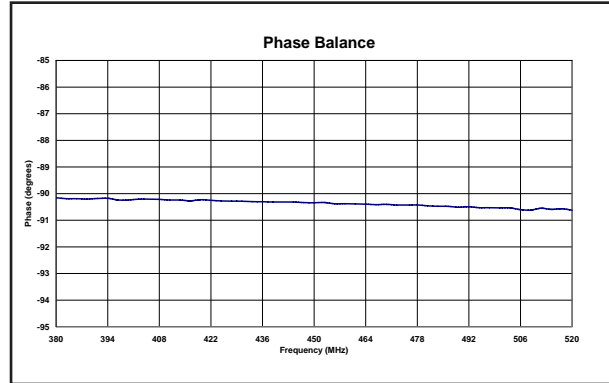
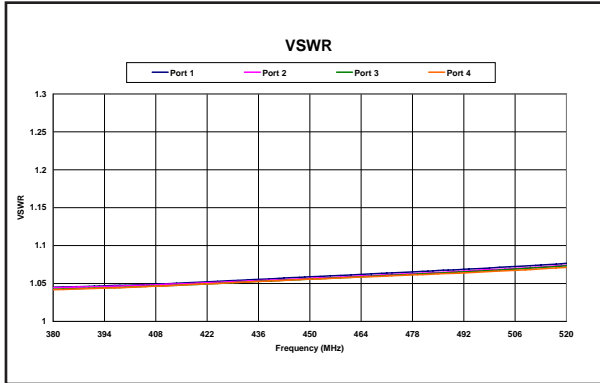
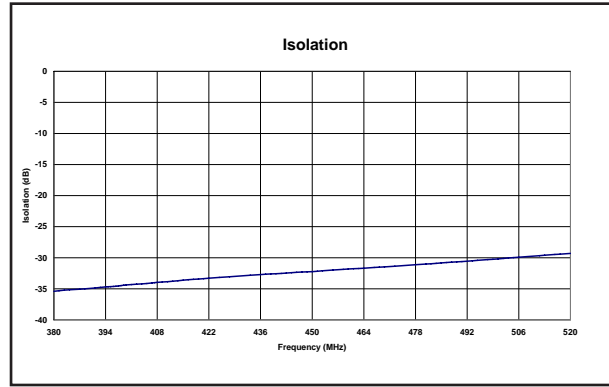
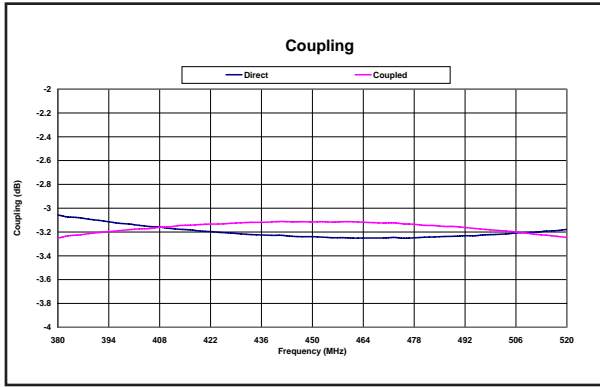


**THE MULTI-MIX MICROTECHNOLOGY® GROUP IS ISO 9001:2000 REGISTERED**

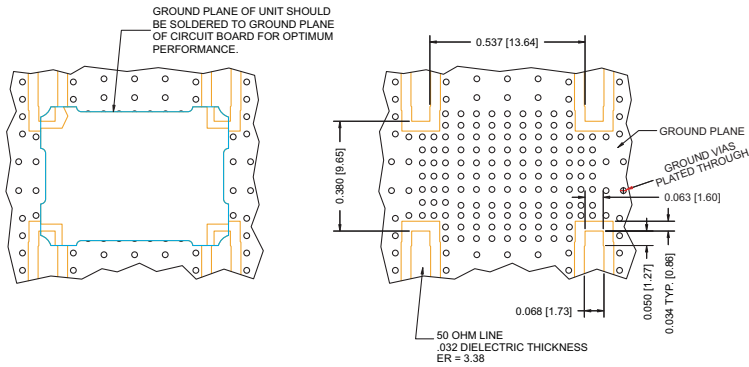


U.S. Patent 6,099,677 and other Patents Pending.

## TYPICAL PERFORMANCE



## MOUNTING CONFIGURATION



## TRUTH TABLE

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