

TECHNICAL DESCRIPTION

FEATURES

- 450 - 700 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



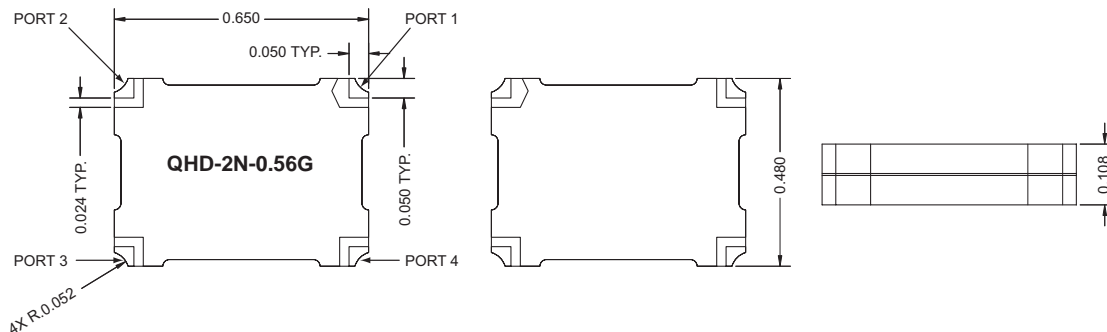
The QHD-2N-0.56G series is a member of the Multi-Mix QHD family of 3-dB 90° couplers for use in the 450 - 700 MHz range. The QHD-2N-0.56G exhibits low insertion loss, low VSWR, and high isolation. Excellent phase and amplitude balance and high RF power handling capability make this series ideal for use in radios for Homeland Security.

The construction of QHD quad hybrids is based on fusion bonded multilayer 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) |
|-----------------------|-----------------------|---------------------|-------------------------|---------------|----------------------------|
| 450 - 700 | | 20 | 0.25 | 1.20:1 | ±0.3 |
| PHASE BALANCE (MAX) | INPUT POWER (CW, MAX) | SIZE (INCHES) | WEIGHT (GRAMS/OZ.) | RF INTERFACE | OPERATING TEMPERATURE |
| 90 ± 3° | 125 W | 0.65 x 0.48 x 0.108 | 2.10 / .074 | Surface Mount | -55° - +85° C |

PACKAGE OUTLINE

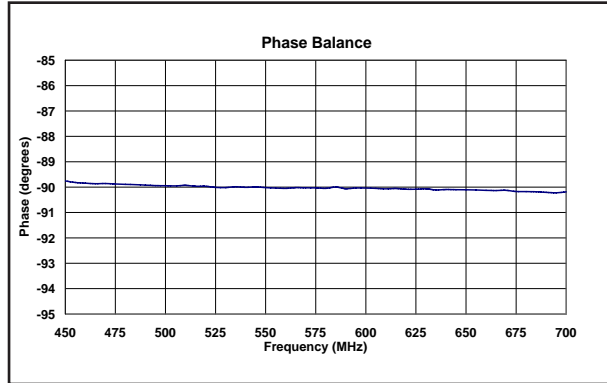
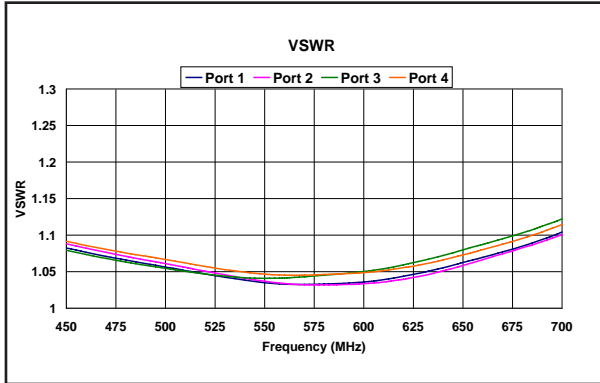
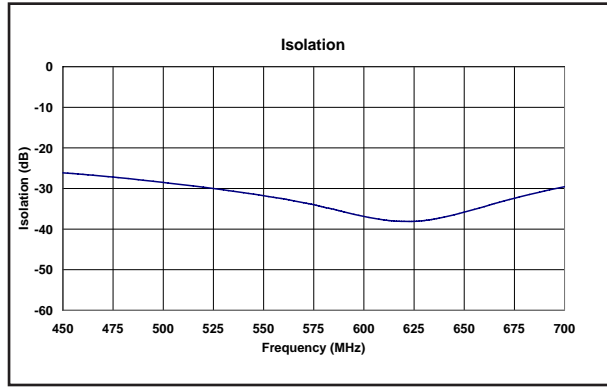
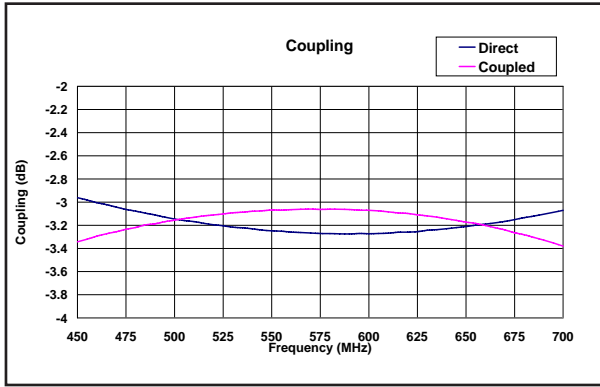


THE MULTI-MIX MICROTECHNOLOGY® GROUP IS ISO 9001:2000 REGISTERED

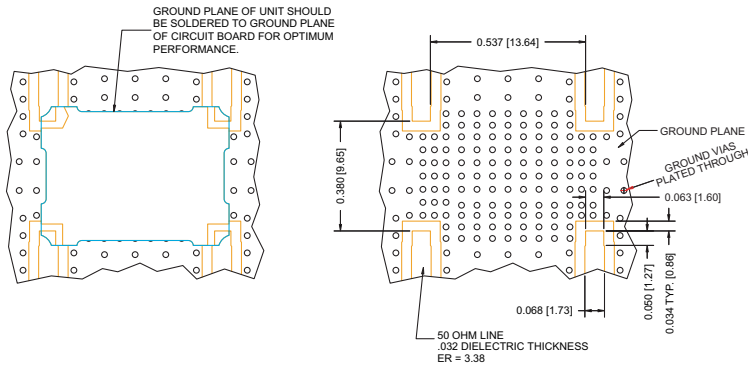


U.S. Patent 6,099,677 and other Patents Pending.

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 |