

TECHNICAL DESCRIPTION

FEATURES

- 410 - 894 MHz
- LOW LOSS
- HIGH DIRECTIVITY
- EXCELLENT COUPLING ACCURACY
- SURFACE MOUNT

APPLICATIONS

- GSM 800 BASE STATION RF SUBSYSTEMS
- LAND MOBILE RADIO (LMR) SYSTEMS
- RADAR COMMUNICATIONS
- CDMA 450 BASE STATION RF SUBSYSTEMS
- TV TRANSMITTERS



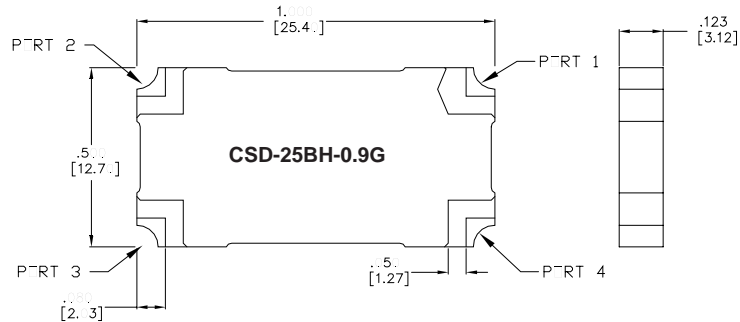
The Multi-Mix® CSD series provides 25 dB and 30 dB coupling at 850 MHz and 450 MHz respectively. The CSD series features accurate coupling factors, low VSWR, and high directivity. Very low insertion loss and high power handling capability make this series ideal for use in base station power amplifiers particularly in the main loop of the feedforward amplifiers. The CSD series is also ideal for use in RF sampling networks and control circuitry in high power transmitters.

CSD directional couplers are 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)	INSERTION LOSS (dB MAX)	MEAN COUPLING (dB)	VSWR (MAX, ALL PORTS)	
410 - 480 450 - 470 869 - 894	0.10	30 ± 2.0 30 ± 2.0 25 ± 2.0	1.12:1	
FREQUENCY SENSITIVITY (dB MAX)	DIRECTIVITY (dB MIN)	AVERAGE POWER (WATTS, MAX.)	RF INTERFACE	OPERATING TEMPERATURE
± 0.75 ± 0.30 ± 0.30	20	450	Leadless Surface Mount	-55° TO +85° C

PACKAGE OUTLINE

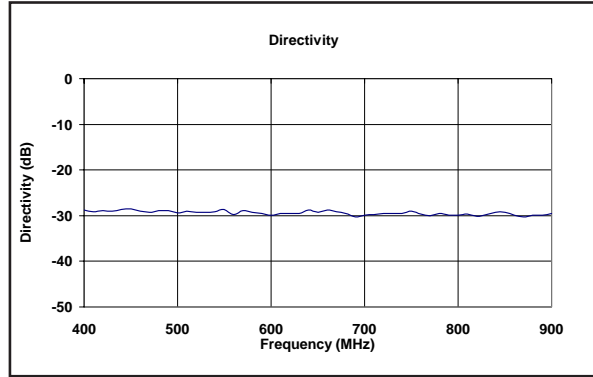
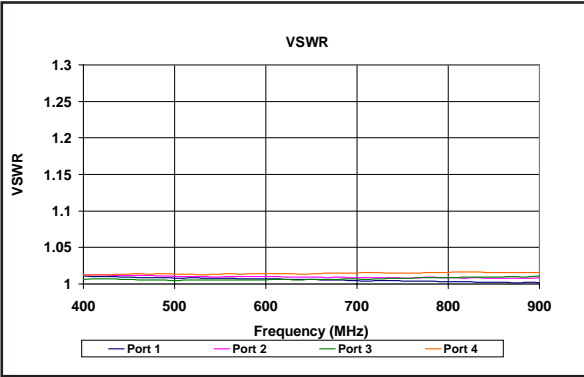
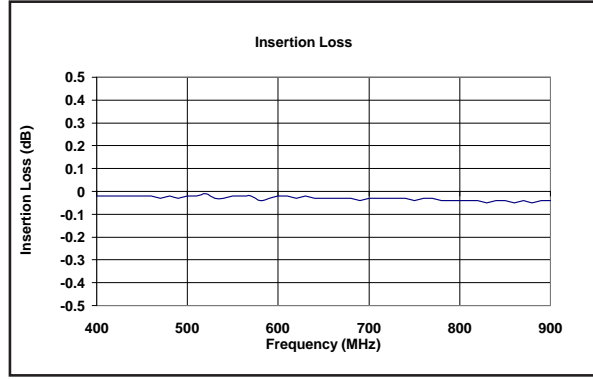
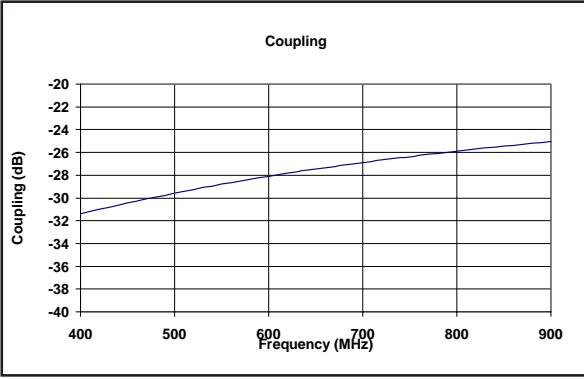


THE MULTI-MIX MICROTECHNOLOGY® GROUP IS ISO 9001:2000 REGISTERED

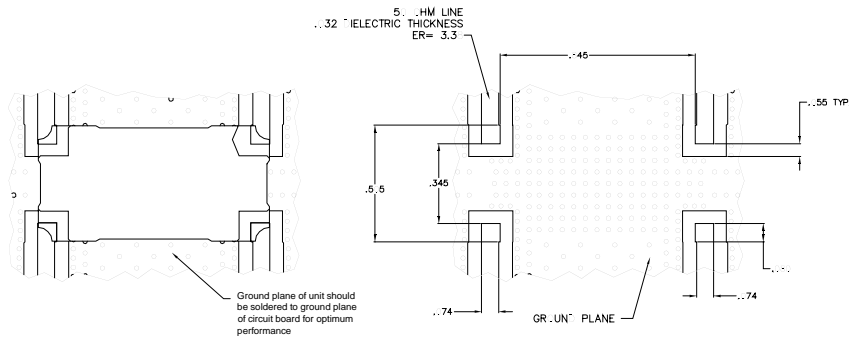


U.S. Patent 6,099,677 and other Patents Pending.

TYPICAL PERFORMANCE



MOUNTING CONFIGURATION



TRUTH TABLE

	1	2	3	4
1	Input	Output	Isolated	Coupled
2	Output	Input	Coupled	Isolated
3	Isolated	Coupled	Input	Output
4	Coupled	Isolated	Output	Input