



FEATURES

- High Power
- Low Profile Surface Mount Package
- Very Low Insertion Loss
- Excellent Amplitude and Phase Balance
- High Isolation
- RoHS
- Tape and Reel for High Volume Production

APPLICATIONS

- Power Amplifiers
- Signal Distribution Networks
- Antenna Feeds
- Switch Networks
- High Power Combiners/Splitters
- Phase Shifters

GENERAL DESCRIPTION

The HMD2F is a high performance 3dB hybrid coupler in a surface mount package. This low profile coupler handles up to 100 watts of CW power. The HMD2F is designed for those demanding applications where low loss, excellent amplitude and phase balance are required.

The HMD2F is manufactured with materials that have thermal expansion characteristics compatible with industry standard board materials like RO3003, RO4350, FR4 and others. The couplers are available in a RoHS compliant finish and packaged in both reel and tube.

ELECTRICAL SPECIFICATIONS*

3dB HYBRID COUPLER								
Frequency MHz	Isolation dB (min)	Insertion Loss dB (max)	VSWR	Amplitude Balance dB (max)	Phase Error °	Power Handling ** Watts CW	ΘJC °C/Watt	Operating Temperature °C
800 - 1000	23	0.23	1.15	± 0.30	90 ± 2	95	24.1	-55 to +85
869 - 894	25	0.20	1.12	± 0.22	90 ± 2	105	24.1	-55 to +85
925 - 960	25	0.21	1.12	± 0.27	90 ± 2	100	24.1	-55 to +85
1000-1200	15	0.5	1.5	± 0.40	90 ± 5	45	24.1	-55 to +85

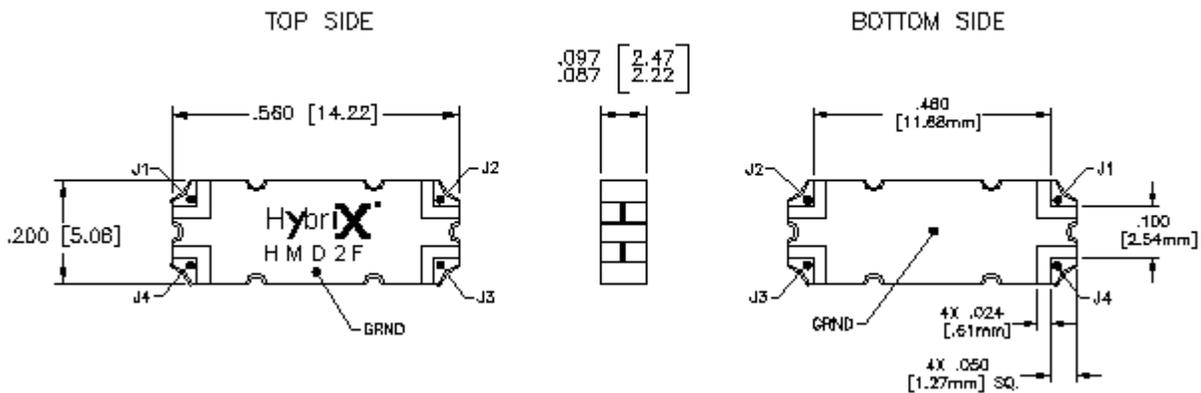
Specification Notes:

* Measured on Florida RF Labs test fixture 008-40-027. Specifications are subject to change without notice.

** Power rating is specified at 85°C base temperature

COUPLER PIN CONFIGURATION AND MECHANICAL OUTLINE

PORTS	P1	P2	P3	P4
P1	-	ISO	-90°	0°
P2	ISO	-	0°	-90°
P3	-90°	0°	-	ISO
P4	0°	-90°	ISO	-



700MHZ - 1100MHZ TYPICAL RF PERFORMANCE AT 25°C

