

COUPLER

90° HYBRID 100 WATT

HybriX®



DATA SHEET

PART SERIES: HMD2F

SHEET 1 OF 3
Dwg HMD2F

EN 13-3117
Revision -

FEATURES

- Low Profile Surface Mount Package
- High Power
- Low Insertion Loss
- High Isolation
- High Reliability

APPLICATIONS

- Power Amplifiers
- Modulators
- Demodulator
- Signal Distribution Network
- Antenna Feeds
- Switch Networks



GENERAL DESCRIPTION

EMC Technology offers high performance hybrid couplers in a low profile, surface mount package. These couplers are designed for demanding applications where high power, low loss and excellent isolation are required.

ORDERING INFORMATION

Part Identifier: HMD2F

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
800 to 1000 MHz	22 dB Min	0.15 dB Max	1.15 Max	0.3 dB Max	90° ± 3	100 Watts CW

2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +85°C

3.0 MARKING

HybriX, Part Number and Pin 1 Indicator

4.0 QUALITY ASSURANCE

Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL.

Visual and Mechanical Examination for Conformance To Outline Drawing Requirements.
Measure Amplitude Balance and VSWR

Test Data Requirements

No Test Data Required
Data Retention – 12 months

5.0 PACKAGING

Standard: Tape And Reel

Note: Specifications are subject to change.

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Dwg HMD2F

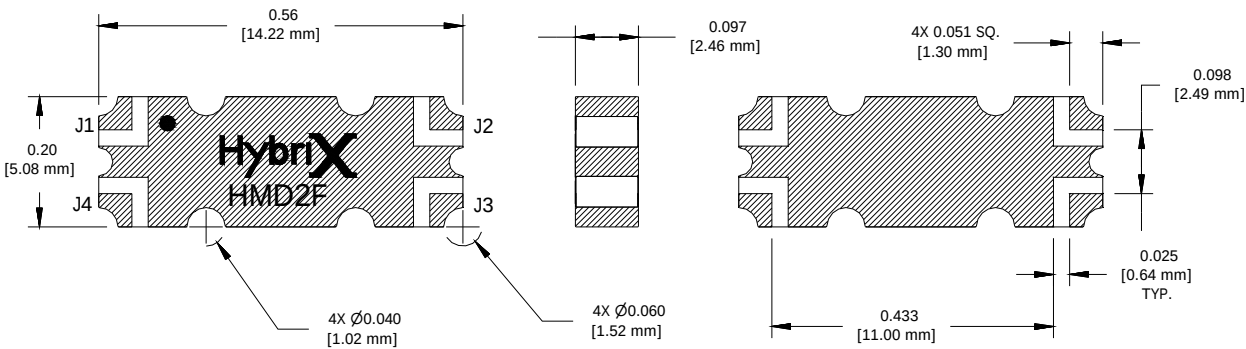
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6.0 MECHANICAL

Substrate:	PTFE
Conductor:	Copper
Plating:	Tin
Application Note:	AN0030 (General Hybrid and Directional Coupler)

PIN CONFIGURATION

Port	J1	J2	J3	J4
J1	-	Iso	-90°	0°
J2	Iso	-	0°	-90°
J3	-90°	0°	-	Iso
J4	0°	-90°	Iso	-



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.01 X.XXX = ± 0.005

Note: Specifications are subject to change.

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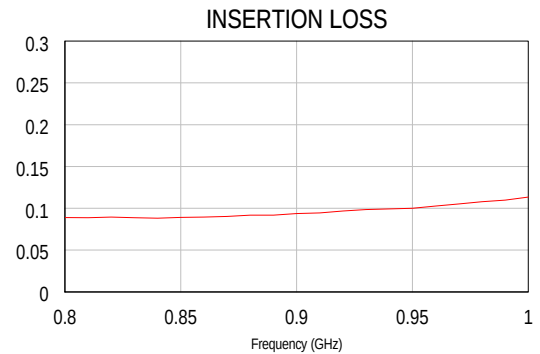
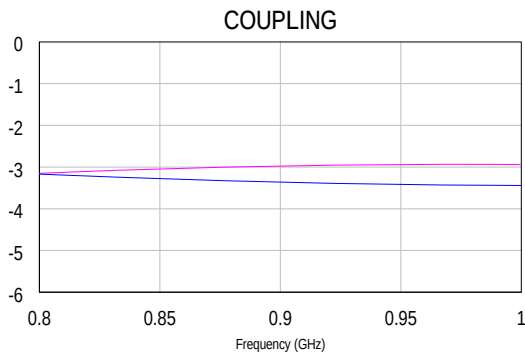
DATA SHEET

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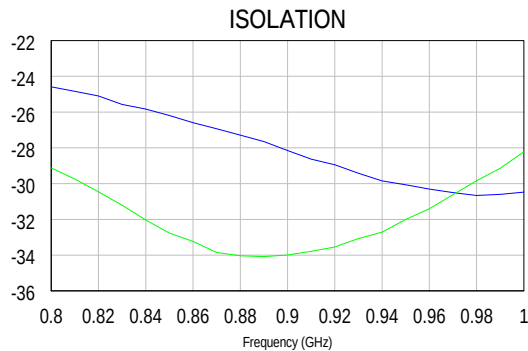
SHEET 3 OF 3
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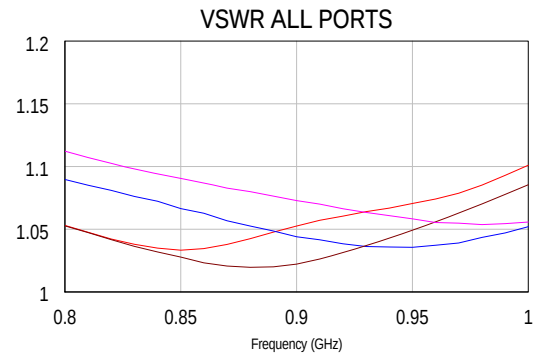
7.0 TYPICAL PERFORMANCE AT 25°C



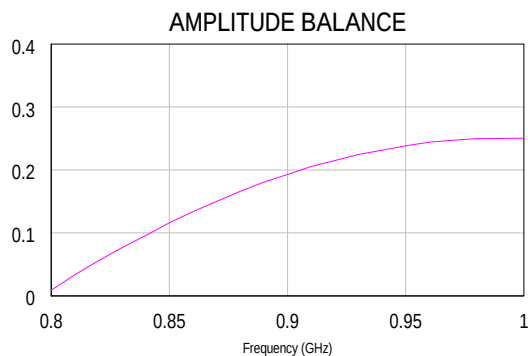
ISOLATION



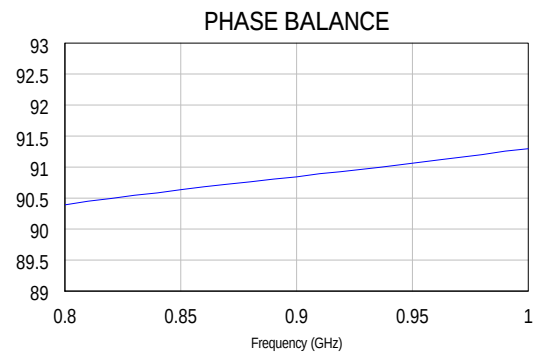
VSWR ALL PORTS



AMPLITUDE BALANCE



PHASE BALANCE



Note: Specifications are subject to change.