

# COUPLER

## 90° HYBRID 10 WATT

HybriX®



DATA SHEET

PART SERIES: HD064M3F

SHEET 1 OF 3  
Dwg 1014085

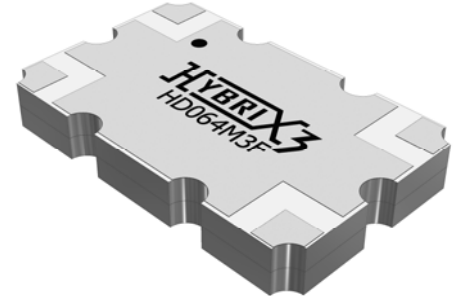
EN 15-1278  
Revision A

### FEATURES

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

### APPLICATIONS

- Power Amplifiers
- Modulator
- Demodulator
- Signal Distribution Network
- Antenna Feeds
- Switch Networks
- MRI Applications



### GENERAL DESCRIPTION

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

### ORDERING INFORMATION

Part Identifier: **HD064M3F**

### SPECIFICATIONS

#### 1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
63 to 65 MHz	18 dB Min	1.0 dB Max	1.3 Max	0.1 dB Max	90° ± 3	10 Watts CW
59 to 69 MHz	13 dB Min	1.2 dB Max	1.6 Max	0.5 dB Max	90° ± 3	10 Watts CW

#### 2.0 ENVIRONMENTAL

Operating Temperature: -55 °C to + 125 °C

#### 3.0 MARKING

Hybrix, Part Number and Pin 1 Identification

#### 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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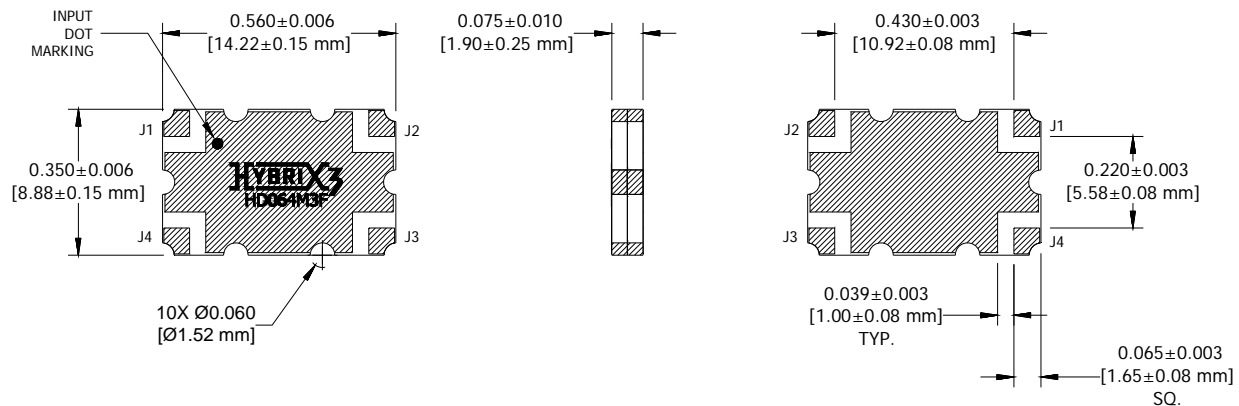
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### 6.0 MECHANICAL

Substrate:	LTCC
Conductor:	Silver
Plating:	Copper, Silver Plated
Application Note:	AN0030 (General Hybrid and Directional Couplers)

### 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

Metric dimensions are provided for reference only.

Note: Specifications are subject to change.

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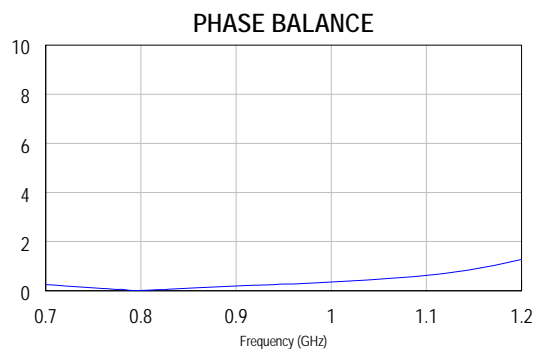
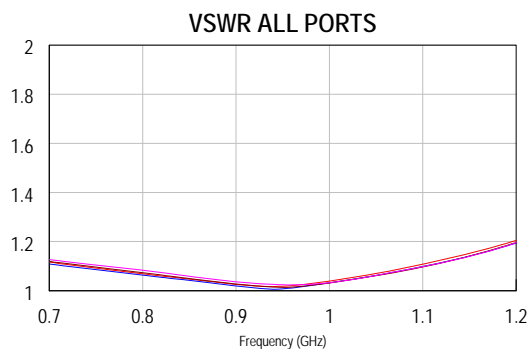
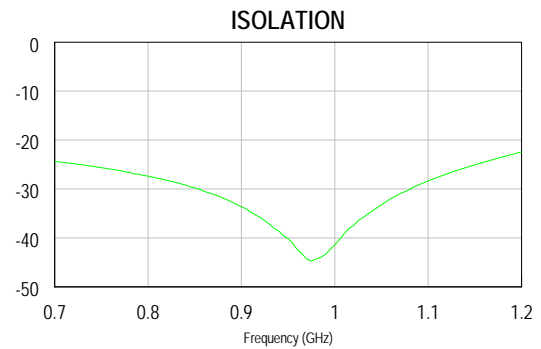
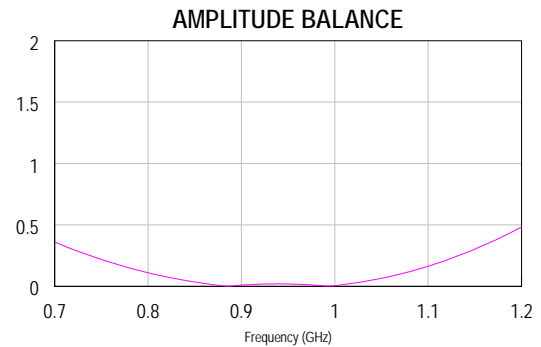
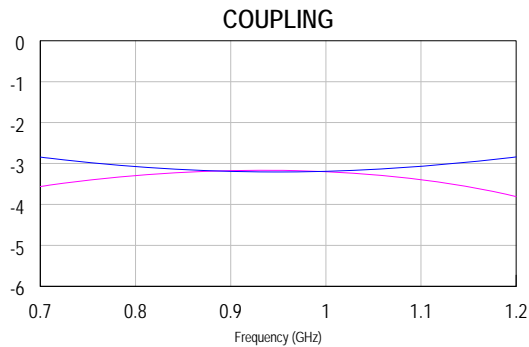
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### 7.0 TYPICAL PERFORMANCE AT 25°C



Note: Specifications are subject to change.