

# COUPLER

## 90° HYBRID 100 WATT

HybriX®



DATA SHEET

PART SERIES: HML2F

SHEET 1 OF 3  
Dwg HML2F

EN 13-3117  
Revision -

### FEATURES

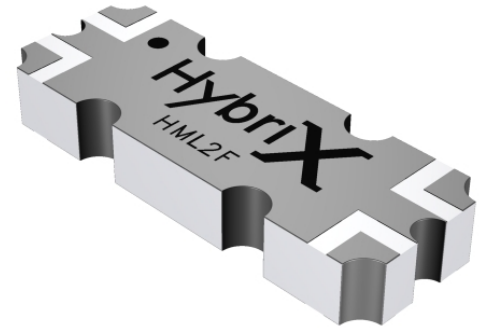
- Low Profile Surface Mount Package
- High Power
- Low Insertion Loss
- High Isolation
- High Reliability

### APPLICATIONS

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

### 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:** HML2F

### SPECIFICATIONS

#### 1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
1.9 - 2.3 GHz	25 dB Min	0.11 dB Max	1.12 Max	0.2 dB Max	90° ± 2	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.*

# COUPLER

## 90° HYBRID 100 WATT

HybriX®



DATA SHEET

PART SERIES: HML2F

SHEET 2 OF 3  
Dwg HML2F

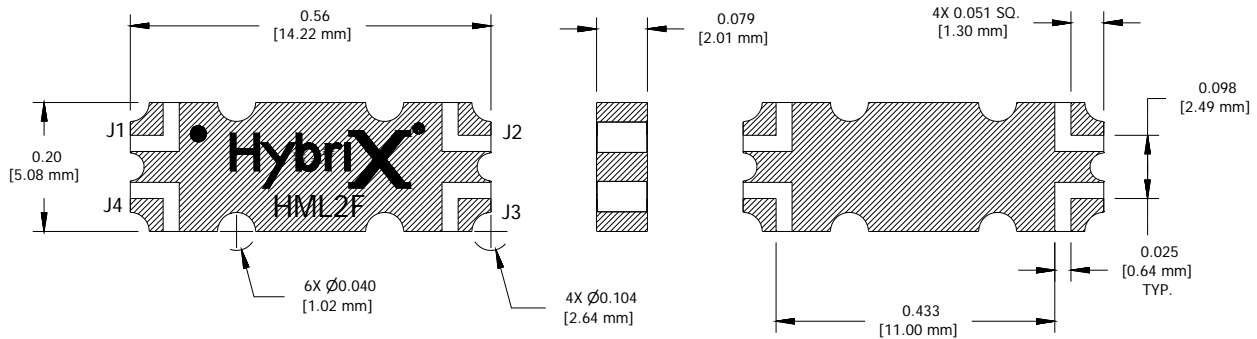
EN 13-3117  
Revision -

### 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.

# COUPLER 90° HYBRID 100 WATT

HybriX®



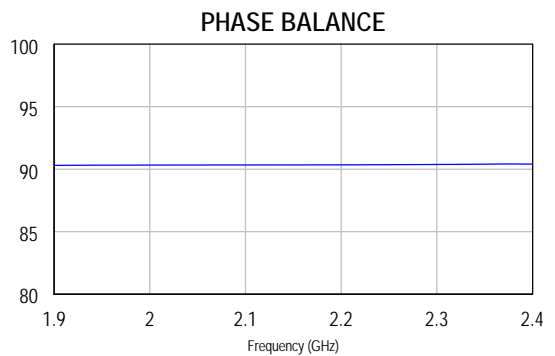
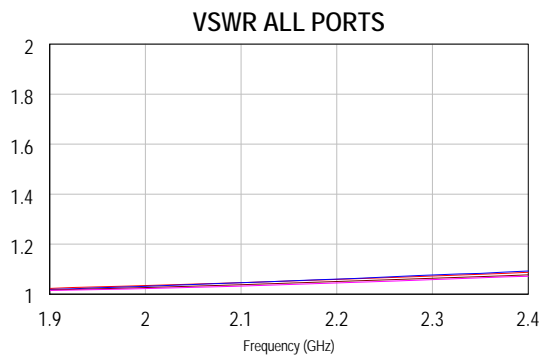
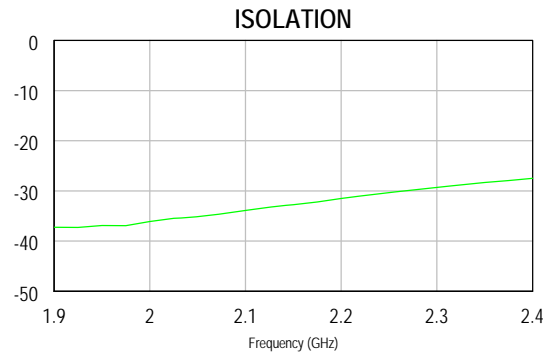
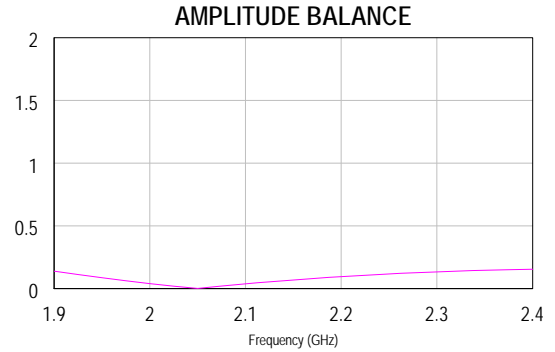
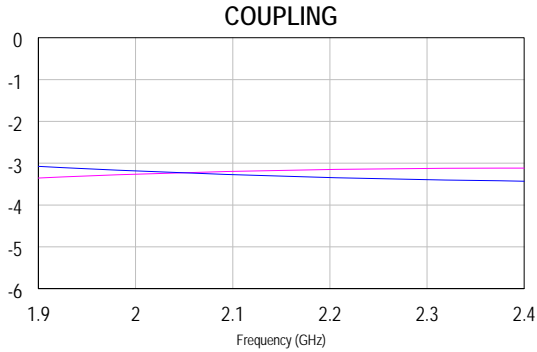
DATA SHEET

PART SERIES: HML2F

SHEET 3 OF 3  
Dwg HML2F

EN 13-3117  
Revision -

## 7.0 TYPICAL PERFORMANCE AT 25°C



Note: Specifications are subject to change.