## COUPLER 90° HYBRID 5 WATT







DATA SHEET PART SERIES: HVJ3F

SHEET 1 OF 3 Dwg HVJ3F EN 13-3225 Revision -

#### **FEATURES**

Low Profile Surface Mount Package

**Ultra-Compact Footprint** 

High Power

Low Insertion Loss High Isolation

High Reliability

#### **APPLICATIONS**

Low Noise Amplifiers

Modulator

Demodulator

Signal Distribution Network

Antenna Feeds

Switch Networks

Phase Shifter



#### **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: HVJ3F** 

#### **SPECIFICATIONS**

#### 1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
1700 to 2000 MHz	24 dB Min	0.35 dB Max	1.20 Max	± 0.60 dB Max	90° ± 5	5 Watts CW

Cage Codes: 24602 / 2Y194

#### 2.0 ENVIRONMENTAL

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

#### 3.0 MARKING

Center Frequency, Coupling 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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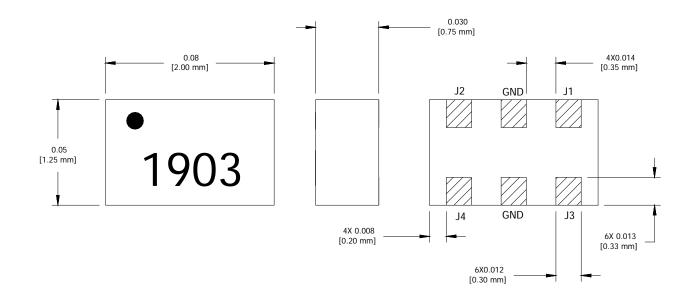
#### **6.0 MECHANICAL**

Substrate: LTCC
Conductor: Silver
Plating: Gold

Application Note: AN0030 (General Hybrid and Directional Coupler)

#### PIN CONFIGURATION

Port	J1	J2	J3	J4
J1	-	Iso	-90°	00
J2	Iso	-	00	-90°
J3	-90°	00	-	Iso
J4	00	-90°	Iso	-



Cage Codes: 24602 / 2Y194

Unless Otherwise Specified: TOLERANCE:  $X.XX = \pm 0.01$   $X.XXX = \pm 0.005$ 

Metric dimensions are provided for reference only.

Note: Specifications are subject to change.

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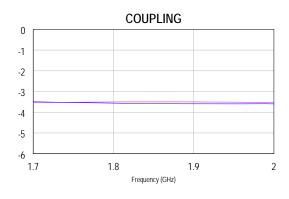


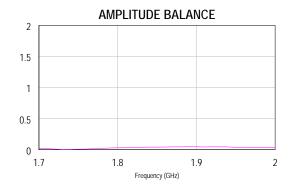
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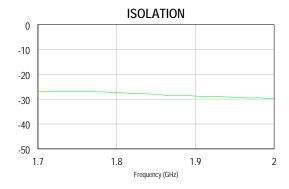
EN 13-3225 Revision -

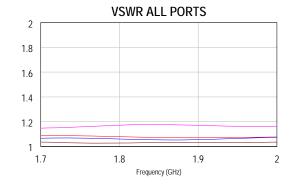
### 7.0 TYPICAL PERFORMANCE AT 25°C

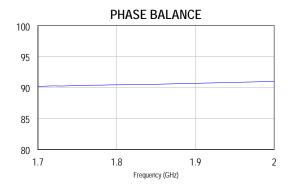












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