

COUPLER 90° HYBRID 5 WATT

HybriX®



DATA SHEET

PART SERIES: HVV3F

SHEET 1 OF 3
Dwg HVV3F

EN 13-3225
Revision -

FEATURES

- Low Profile Surface Mount Package
- Ultra-Compact Footprint
- High Power
- Low Insertion Loss
- High Isolation
- High Reliability
- Automated Assembly Compatibility

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: HVV3F

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
700 to 1000 MHz	17 dB Min	0.6 dB Max	1.26 Max	± 0.90 dB Max	90° ± 7	5 Watts CW
700 to 800 MHz	18 dB Min	0.5 dB Max	1.15 Max	± 0.60 dB Max	90° ± 4	5 Watts CW

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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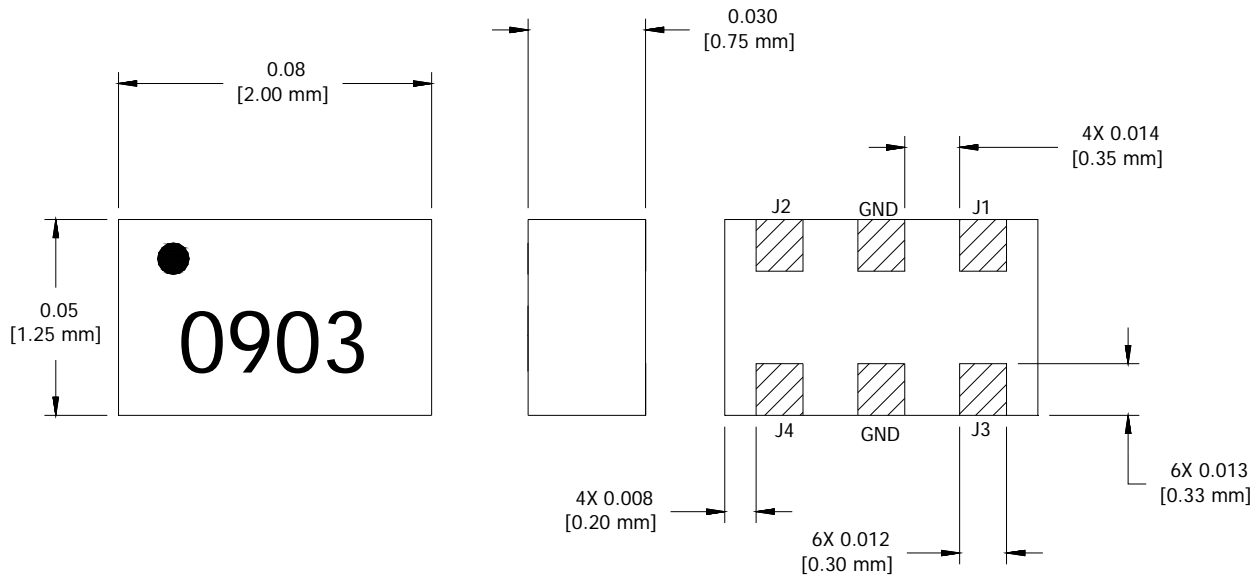
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6.0 MECHANICAL

Substrate: LTCC
 Conductor: Silver
 Plating: Gold
 Application Note: AN0030 (General Hybrid and Directional Coupler)

PIN CONFIGURATION

Port	J1	J2	J3	J4
J1	-	Iso	-90°	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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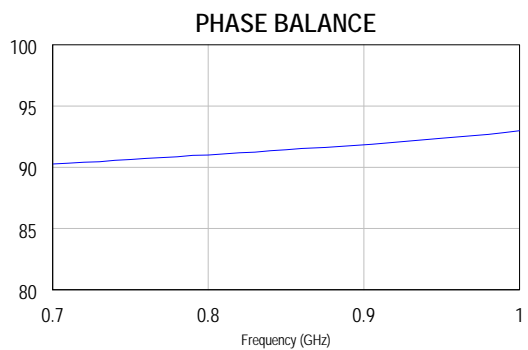
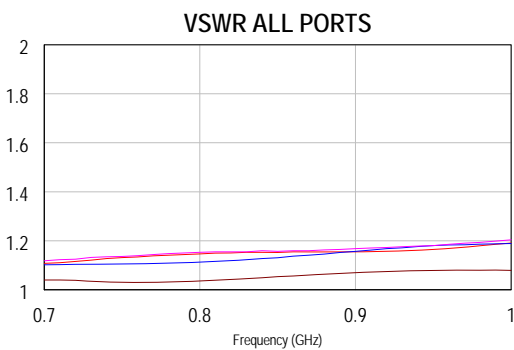
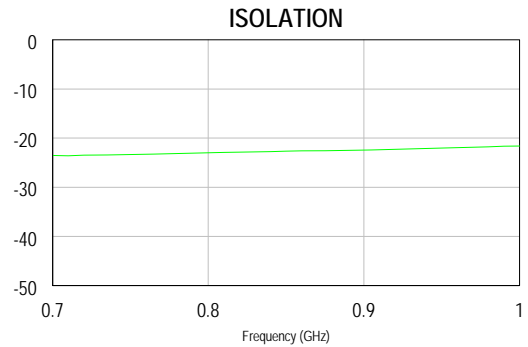
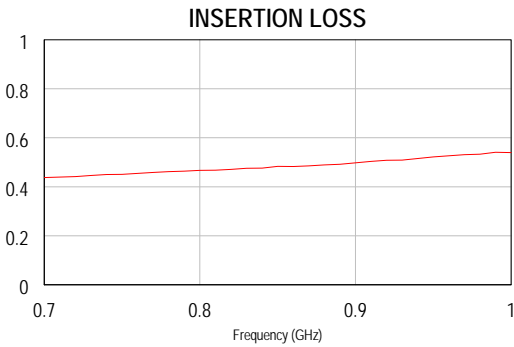
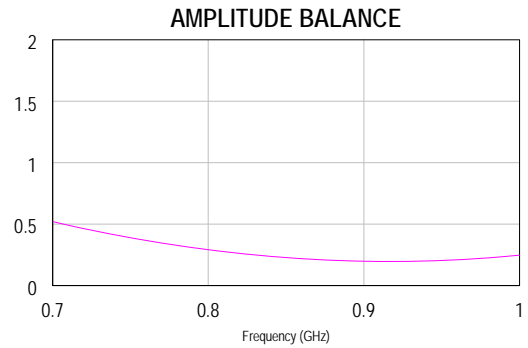
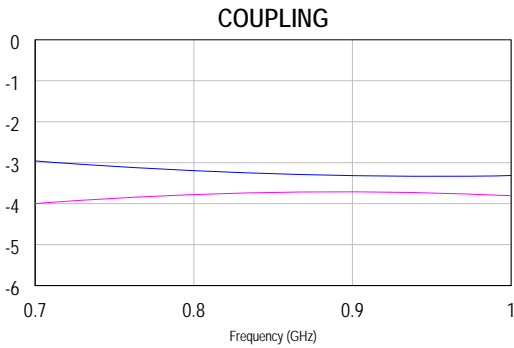
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7.0 TYPICAL PERFORMANCE AT 25°C



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