COUPLER
90° HYBRID 5 WATT

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: HVP3F

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
2300 to 2700 MHz	24 dB Min	0.35 dB Max	1.20 Max	± 0.60 dB Max	90º ± 5	5 Watts CW

2.0 ENVIRONMENTAL

Operating Temperature: -55ºC to +125ºC

3.0 MARKING

Center Frequency (X.1 GHz), 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

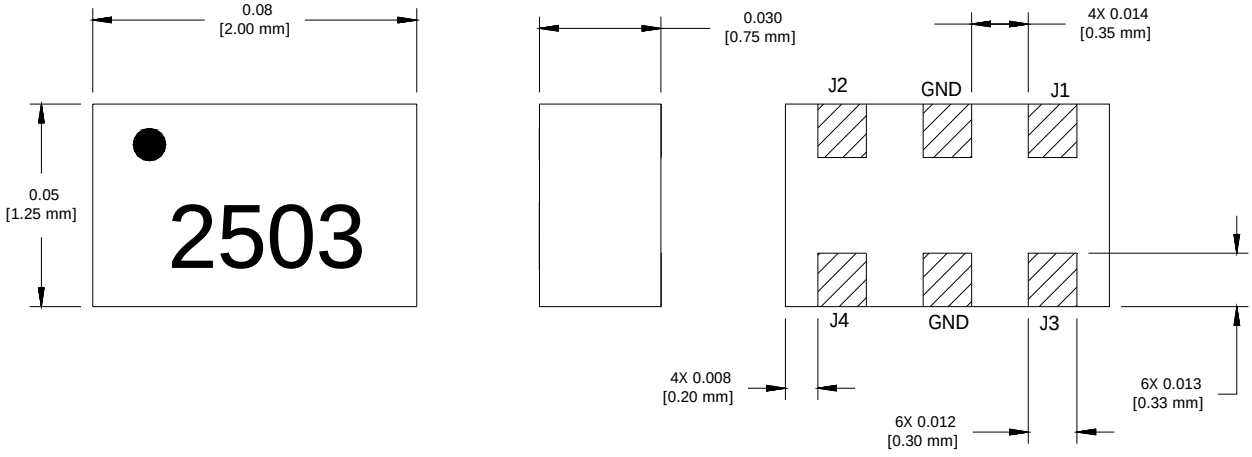
Note: Specifications are subject to change.

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	-90º	0º
J2	Iso	-	0º	-90º
J3	-90º	0º	-	Iso
J4	0º	-90º	Iso	-



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

Metric dimensions are provided for reference only

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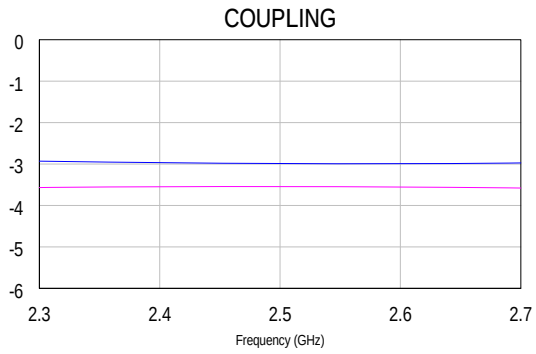
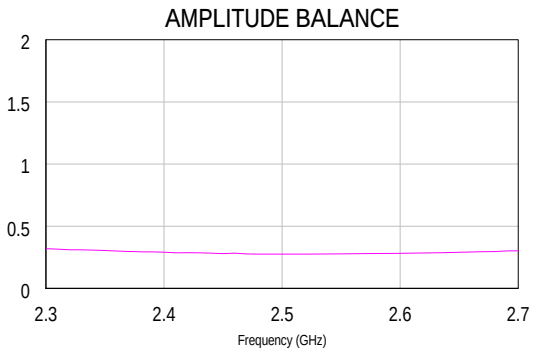
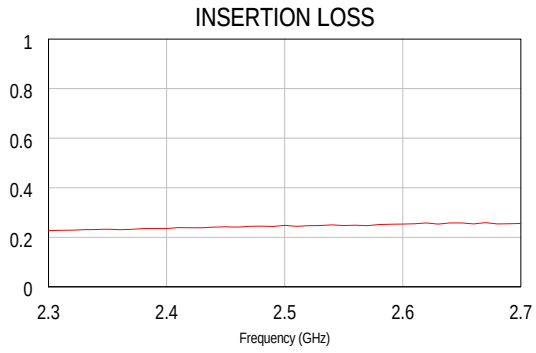
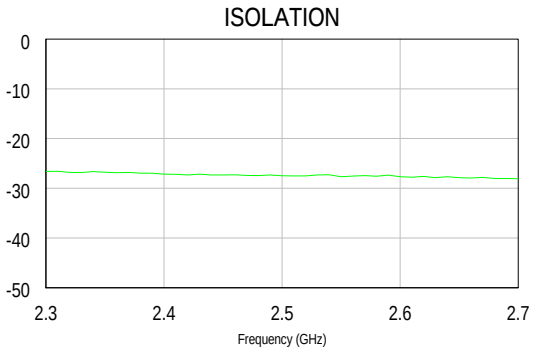
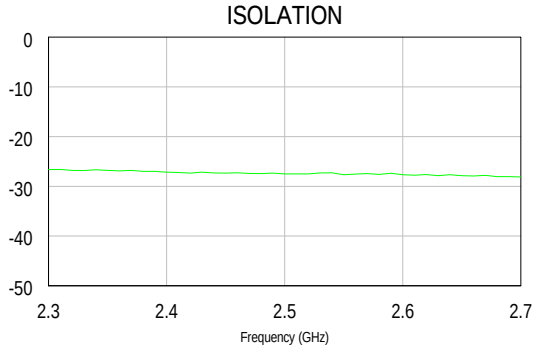
7.0 TYPICAL PERFORMANCE AT 25°C

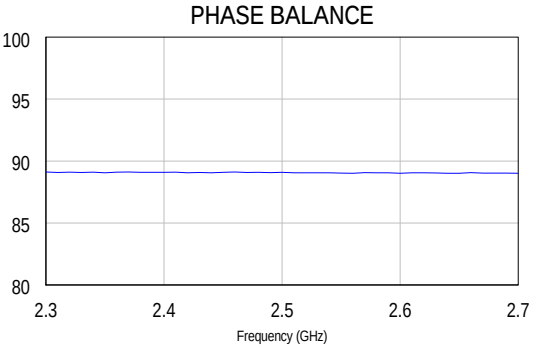












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