

COUPLER

90° HYBRID 100 WATT

HybriX®



DATA SHEET

PART SERIES: HPK2F

SHEET 1 OF 3
Dwg HPK2F

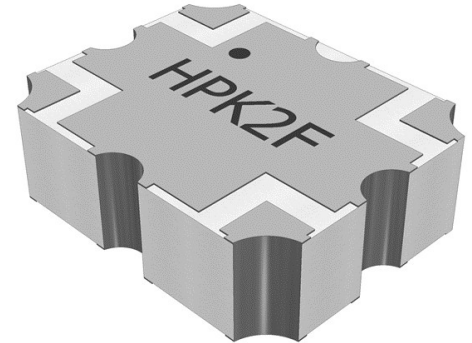
EN 15-2107
Revision C

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



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: **HPK2F**

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
1700 to 1800 MHz	20 dB Min	0.2 dB Max	1.20 Max	±0.4 dB Max	90° ± 3	100 Watts CW
1800 to 2400 MHz	20 dB Min	0.2 dB Max	1.20 Max	±0.3 dB Max	90° ± 3	100 Watts CW
1900 to 2100 MHz	23 dB Min	0.2 dB Max	1.20 Max	±0.3 dB Max	90° ± 3	100 Watts CW
*2400 to 2700 MHz	17 dB Min	0.35 dB Max	1.40 Max	±0.3 dB Max	90° ± 3	50 Watts CW

*Extended band performance is for reference only.

2.0 ENVIRONMENTAL

Operating Temperature: -55 °C to +110 °C

3.0 MARKING

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: HPK2F

SHEET 2 OF 3
Dwg HPK2F

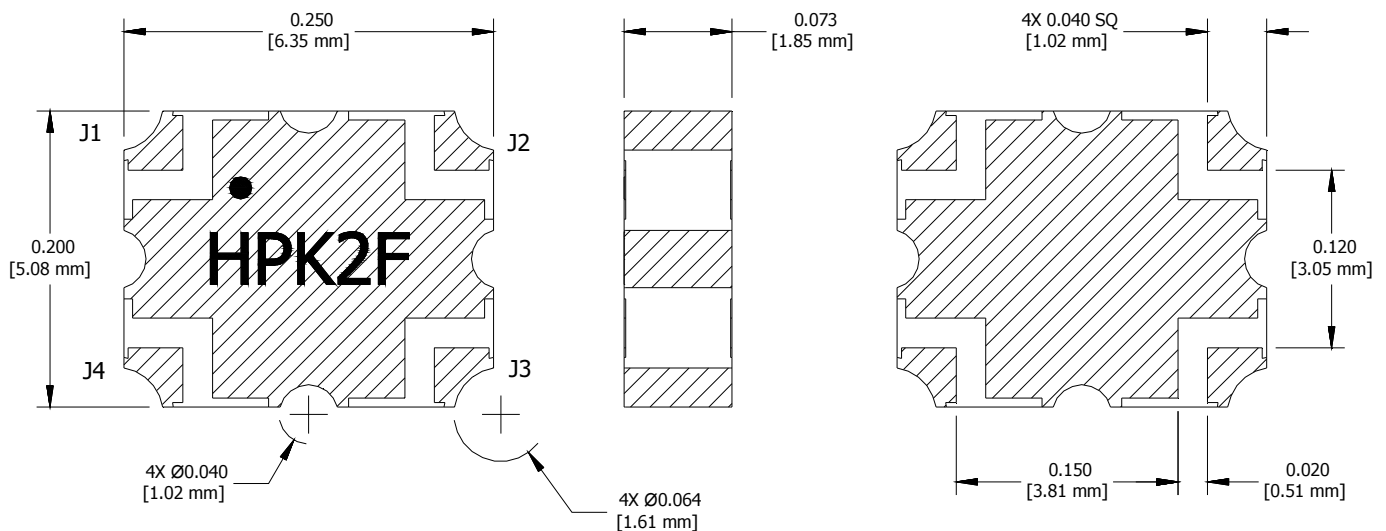
EN 15-2107
Revision C

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

Metric dimensions are provided for reference only.

Note: Specifications are subject to change.

COUPLER

90° HYBRID 100 WATT

HybriX®



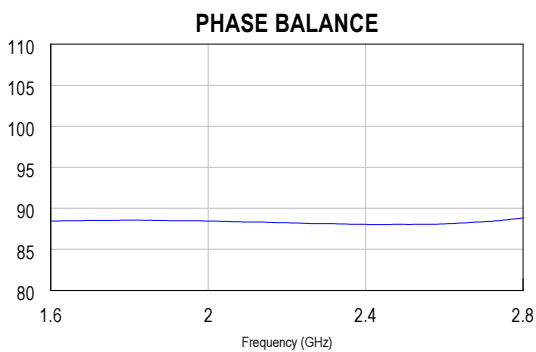
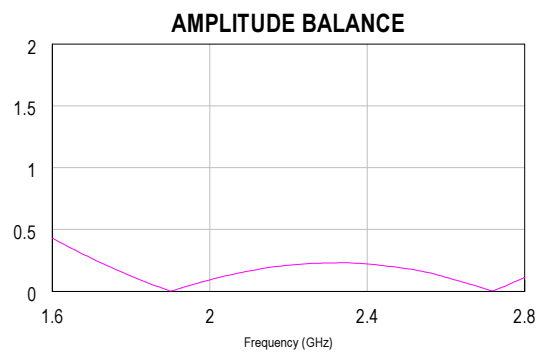
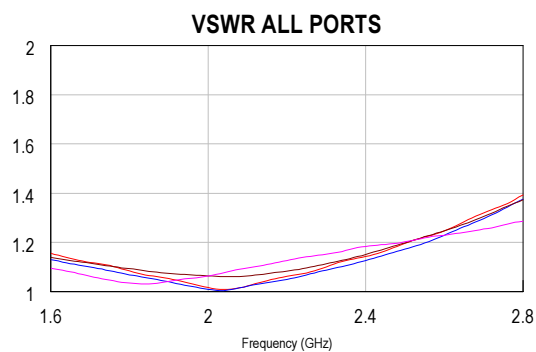
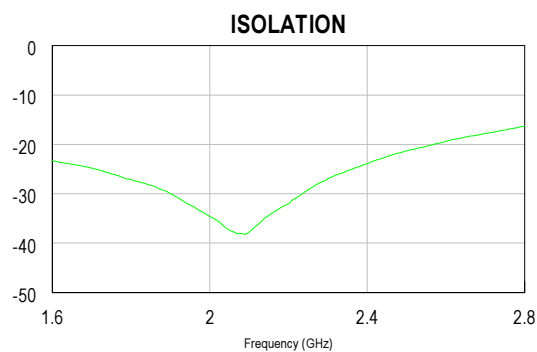
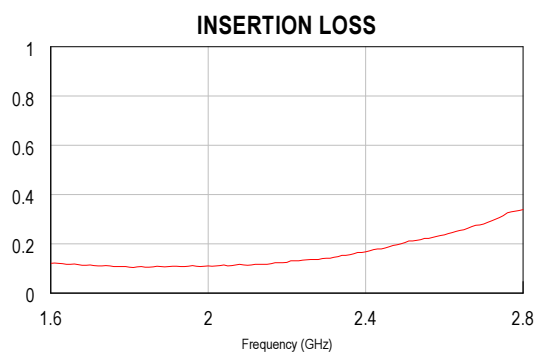
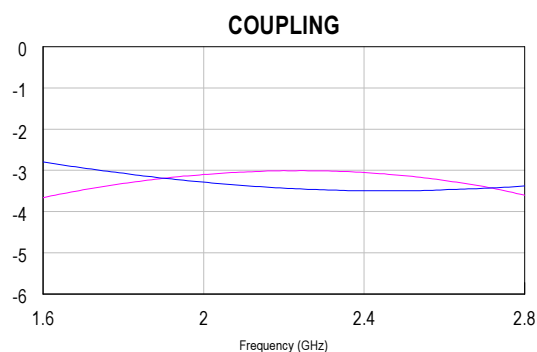
DATA SHEET

PART SERIES: HPK2F

SHEET 3 OF 3
Dwg HPK2F

EN 15-2107
Revision C

7.0 TYPICAL PERFORMANCE AT 25°C



Note: Specifications are subject to change.

smiths microwave

423F100 Rev-

Cage Codes: 24602 / 2Y194

www.emc-rflabs.com • +1 772-286-9300

AS 9100, ISO 9001 and 14001 Certified