

WIDEBAND COUPLER

90° HYBRID 100 WATT

HybriX®



DATA SHEET

PART SERIES: WH0530TF

SHEET 1 OF 3
Dwg WH0530TF

EN 14-0198
Revision -

FEATURES

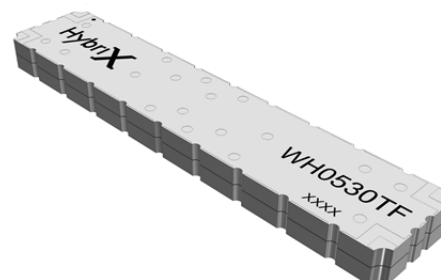
- Low Profile Surface Mount Package
- High Power
- Low Insertion Loss
- High Isolation
- High Reliability
- 100% Tested

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 application where high power, low loss and excellent isolation are required.



ORDERING INFORMATION

Part Identifier: WH0530TF

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
500 - 550 MHz	25 dB Min	0.15 dB Max	1.15:1 Max	± .90 dB Max	90° ± 3°	100 Watts CW
550 - 3350 MHz	20 dB Min	0.40 dB Max	1.20:1 Max	± .60 dB Max	90° ± 3°	100 Watts CW
3350 - 3400 MHz	20 dB Min	0.50 dB Max	1.20:1 Max	± .90 dB Max	90° ± 3°	100 Watts CW

2.0 ENVIRONMENTAL

Operating Temperature: -55 °C to 85 °C

3.0 MARKING

Part Number and Pin 1 Identification

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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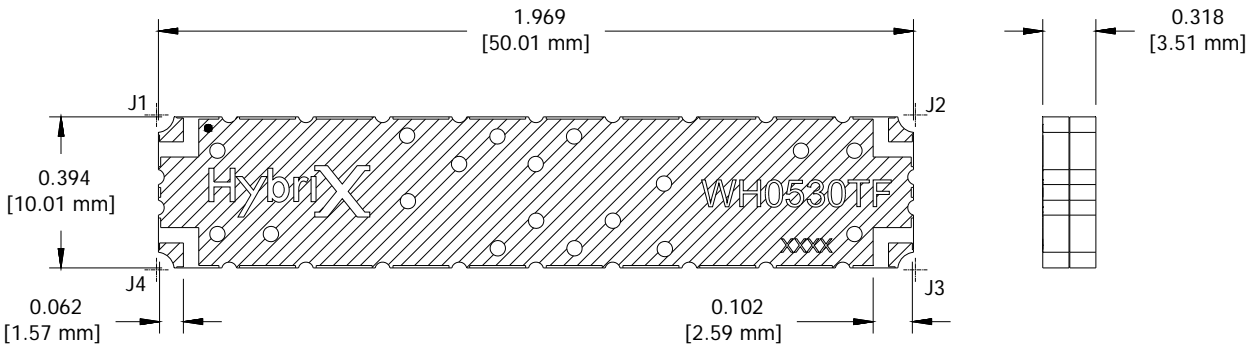
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6.0 MECHANICAL

Substrate:	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.

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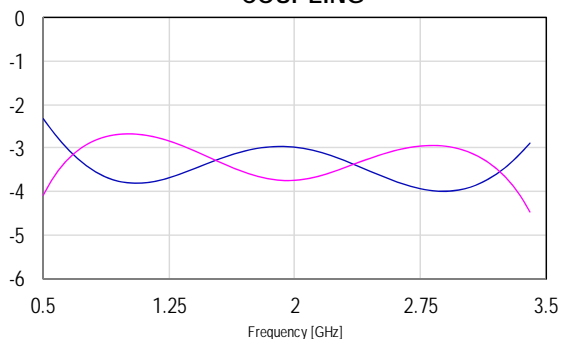
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Dwg WH0530TF

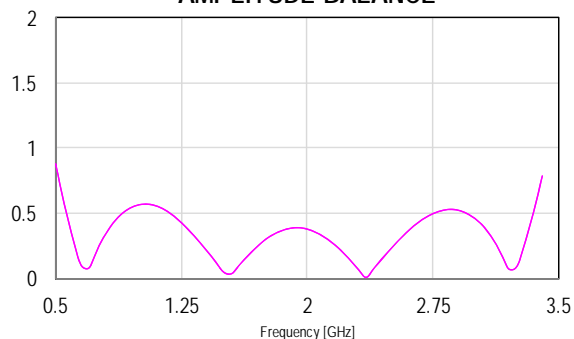
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7.0 TYPICAL PERFORMANCE AT 25°C

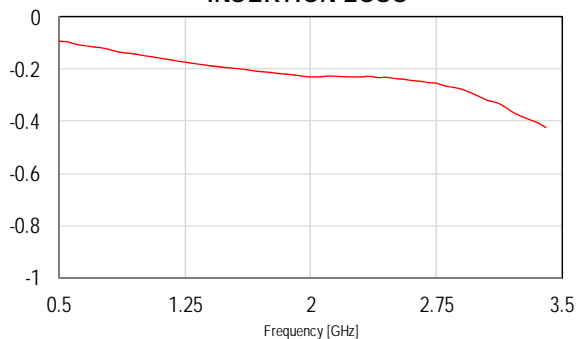
COUPLING



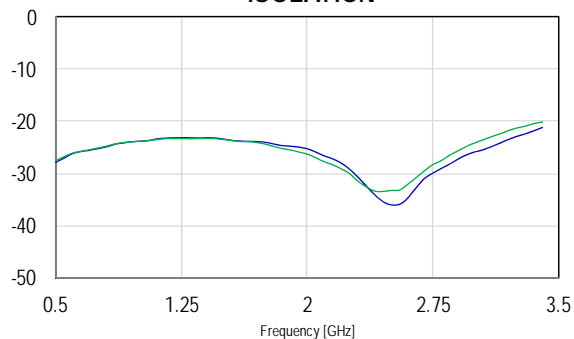
AMPLITUDE BALANCE



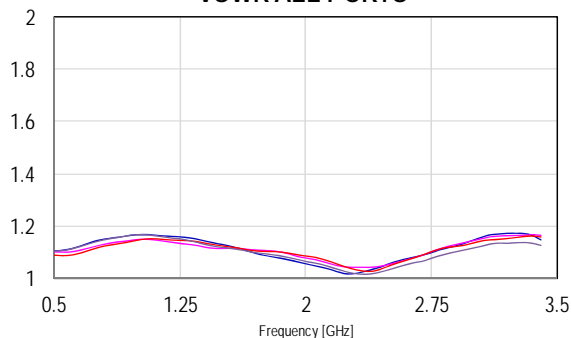
INSERTION LOSS



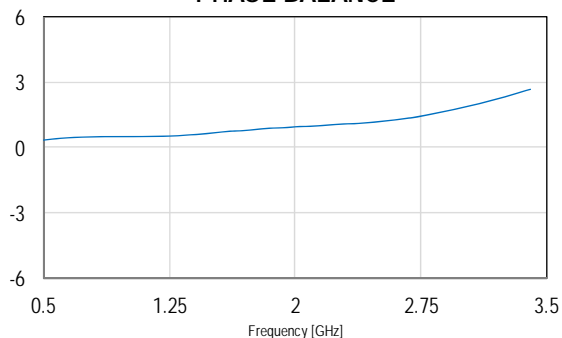
ISOLATION



VSWR ALL PORTS



PHASE BALANCE



Note: Specifications are subject to change.