

COUPLER DIRECTIONAL 50 WATT

HybriX®



DATA SHEET

PART SERIES: DN05W20F

SHEET 1 OF 3
Dwg DN05W20F

EN 13-3456
Revision -

FEATURES

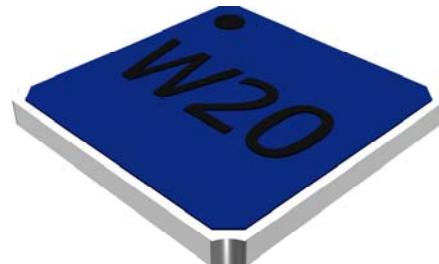
Low Profile Surface Mount Package
High Power
Low Insertion Loss
High Directivity
High Reliability

APPLICATIONS

Power Amplifiers
Power Monitors
Reflectometers
Signal Distribution Networks
Antenna Feeds
Switch Networks

GENERAL DESCRIPTION

EMC Technology offers high performance directional couplers in a low profile, surface mount package. These couplers are designed for demanding applications where high power, low loss and excellent directivity are required.



ORDERING INFORMATION

Part Identifier: DN05W20F

SPECIFICATIONS

1.0 ELECTRICAL

Frequency	Coupling	Insertion Loss	VSWR	Directivity	Power Handling
15.0 to 18.5 GHz	20 ± 1.5 dB	0.6 dB Max	1.6 Max	26.0 dB Min	50 Watts CW
17.0 to 18.5 GHz	20 ± 1.5 dB	0.6 dB Max	1.6 Max	32.0 dB Min	50 Watts CW

2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +85°C

3.0 MARKING

W20 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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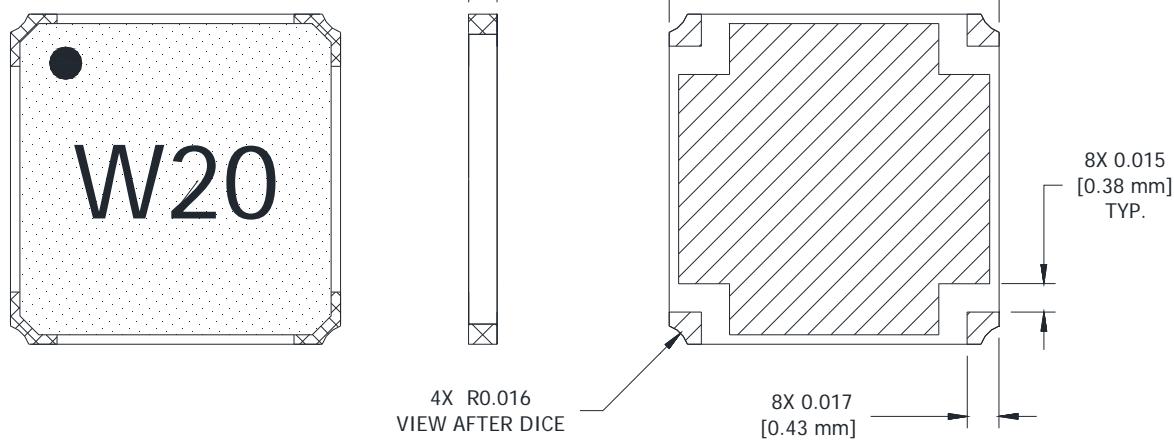
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6.0 MECHANICAL

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

PIN CONFIGURATION

Port	J1	J2	J3	J4
J1	-	Thru	Iso	Coup
J2	Thru	-	Coup	Iso
J3	Iso	Coup	-	Thru
J4	Coup	Iso	Thru	-



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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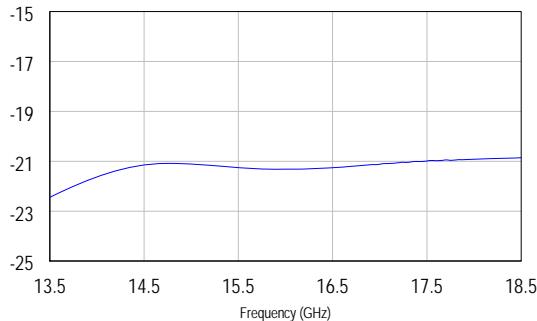
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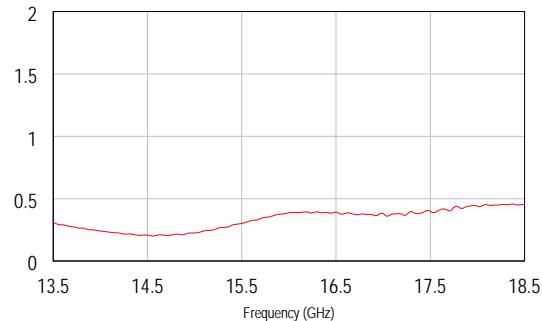
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7.0 TYPICAL PERFORMANCE AT 25°C

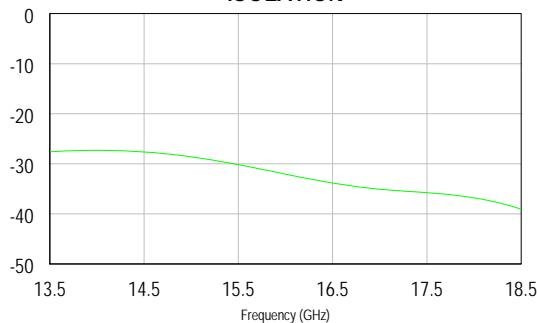
COUPLING



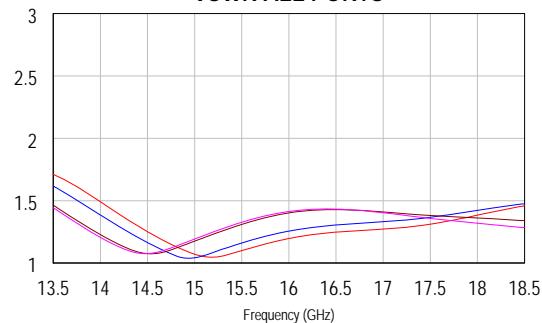
INSERTION LOSS



ISOLATION



VSWR ALL PORTS



Note: Specifications are subject to change.