

# COUPLER DIRECTIONAL 50 WATT

HybriX®



DATA SHEET

PART SERIES: DN05W20F

SHEET 1 OF 3  
Dwg DN05W20F

EN 13-3456  
Revision -

## FEATURES

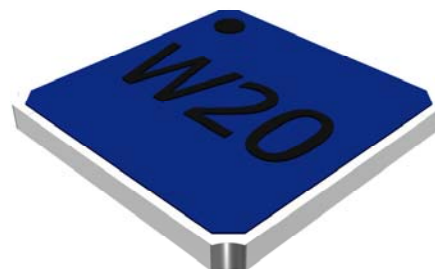
- Low Profile Surface Mount Package
- High Power
- Low Insertion Loss
- High Directivity
- High Reliability

## 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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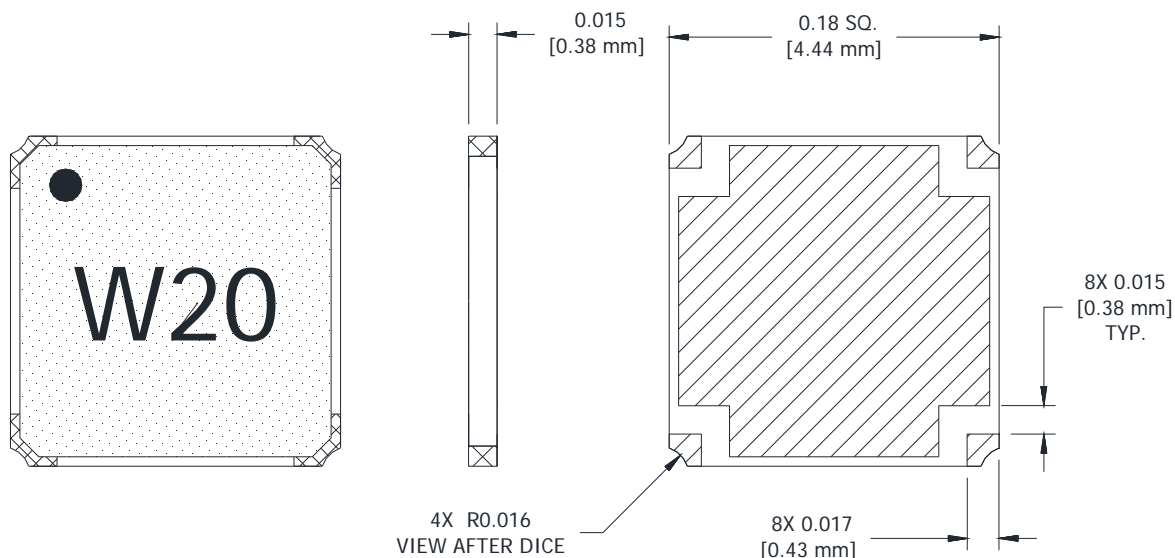
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## 6.0 MECHANICAL

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 =  $\pm 0.01$  X.XXX =  $\pm 0.005$

Metric dimensions are provided for reference only.

Note: Specifications are subject to change.

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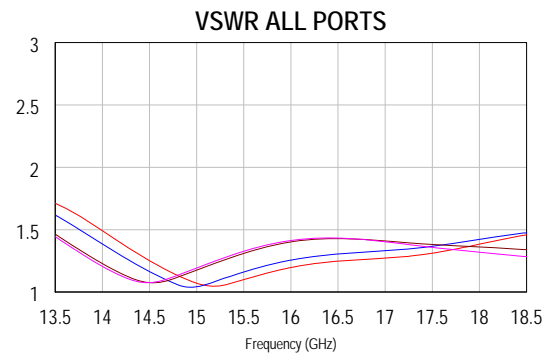
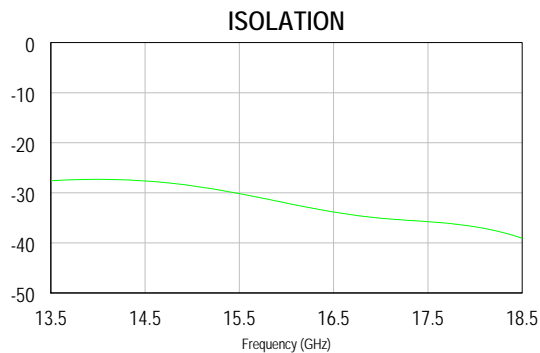
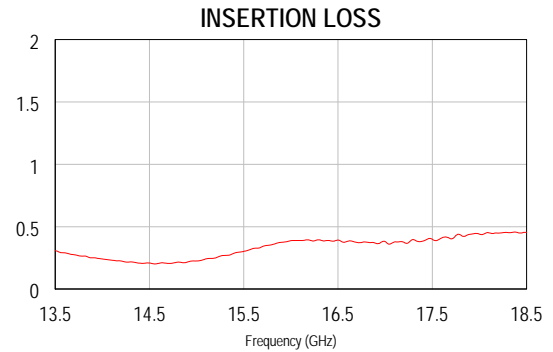
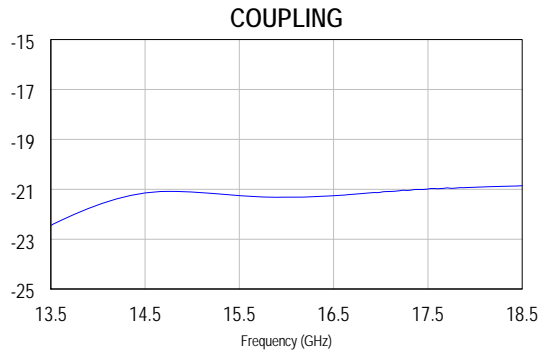
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## 7.0 TYPICAL PERFORMANCE AT 25°C



Note: Specifications are subject to change.