# COUPLER 90° HYBRID 200 WATT







DATA SHEET PART SERIES: HDS2F

SHEET 1 OF 3 Dwg HDS2F

EN 14-2536 Revision A

#### **5FEATURES**

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: HDS2F

## **SPECIFICATIONS**

### 1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Balance	Power Handling
2000 to 4000 MHz	20 dB Min	0.20 dB Max	1.30:1 Max	± 0.50 dB Max	90° ± 4	200 Watts CW

Cage Codes: 24602 / 2Y194

## 2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +85°C

#### 3.0 MARKING

Hybrix, 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.

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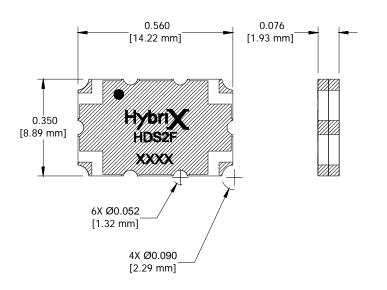
### **6.0 MECHANICAL**

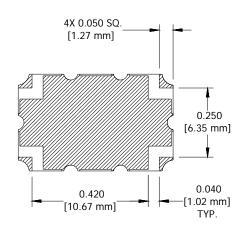
Substrate: PTFE
Conductor: Copper
Plating: Tin

Application Note: AN0030 (General Hybrid and Directional Coupler)

# **PIN CONFIGURATION**

Port	J1	J2	J3	J4
J1	-	Iso	-90°	00
J2	Iso	-	00	-90°
J3	-90°	00	-	Iso
J4	00	-90°	Iso	-





Unless Otherwise Specified: TOLERANCE:  $X.XX = \pm 0.01$   $X.XXX = \pm 0.005$ 

Metric dimensions are provided for reference only.

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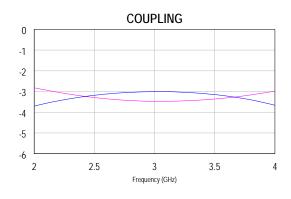


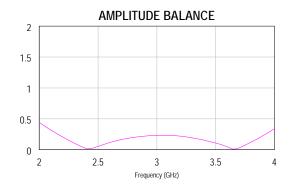


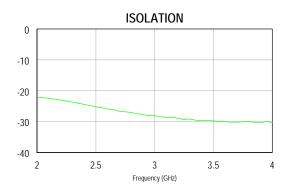
DATA SHEET PART SERIES: HDS2F

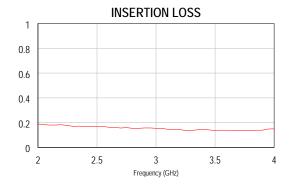
SHEET 3 OF 3 Dwg HDS2F EN 14-2536 Revision A

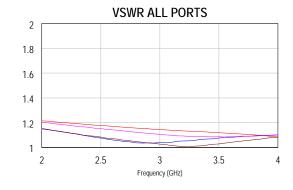
# 7.0 TYPICAL PERFORMANCE AT 25°C

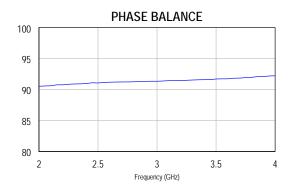












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