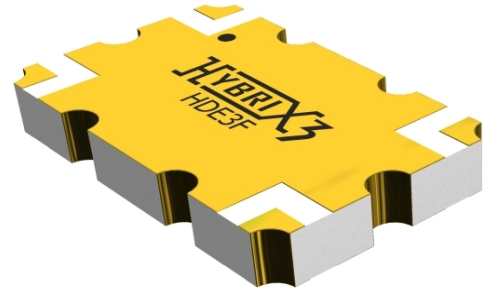


### FEATURES

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

### APPLICATIONS

- Power Amplifiers
- Modulator
- Demodulator
- Signal Distribution Network
- Antenna Feeds
- Switch Networks



### GENERAL DESCRIPTION

Florida RF Labs 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.

### SPECIFICATIONS

#### 1.0 ELECTRICAL

Frequency	Isolation	Insertion Loss	VSWR	Amplitude Balance	Phase Error	Power Handling
1000 to 2000 MHz	20 dB Min	0.3 dB Max	1.2 Max	±0.5 dB Max	90° ±3	200 Watts CW

#### 2.0 MECHANICAL

- Operating Temperature: -55 °C to +125 °C
- Substrate: LTCC
- Conductor: Silver
- Plating: Gold
- Application Note: AN0030 (General Hybrid And Directional Coupler)

#### 3.0 UNIT MARKING

Logo, Part Number and Pin 1 Identification.

#### 4.0 PACKAGING

- Standard: Tape And Reel

#### 5.0 PART NUMBERING

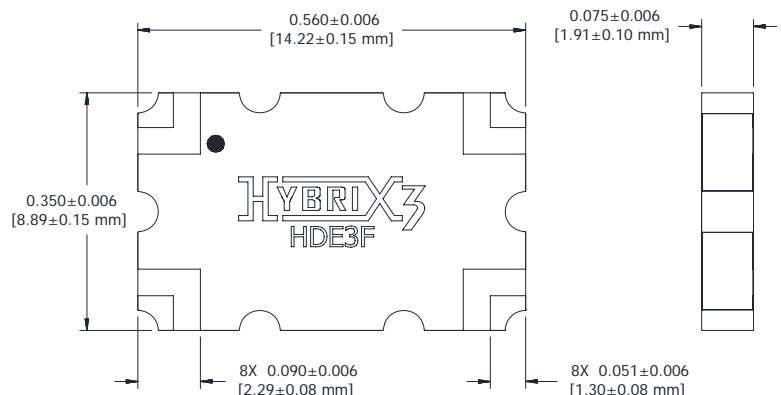
- Part Identifier: HDE3F

#### PIN CONFIGURATION



Port	P1	P2	P3	P4
P1	-	Iso	-90°	0°
P2	Iso	-	0°	-90°
P3	-90°	0°	-	Iso
P4	0°	-90°	Iso	-

#### MECHANICAL OUTLINE

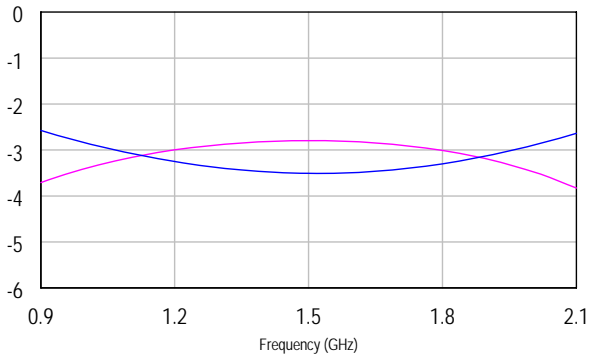


Note: Specifications are subject to change without notice.

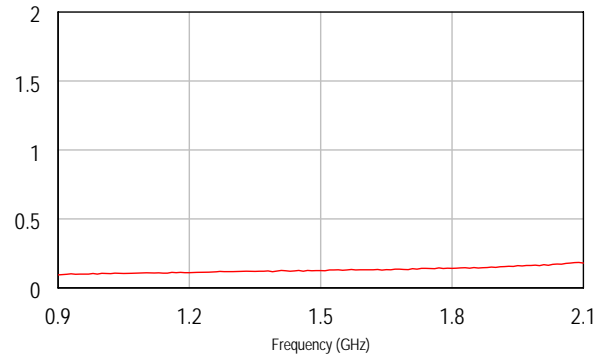
Unless Otherwise Specified: TOLERANCE: .XXX = ± .010

**6.0 TYPICAL PERFORMANCE AT 25 °C**

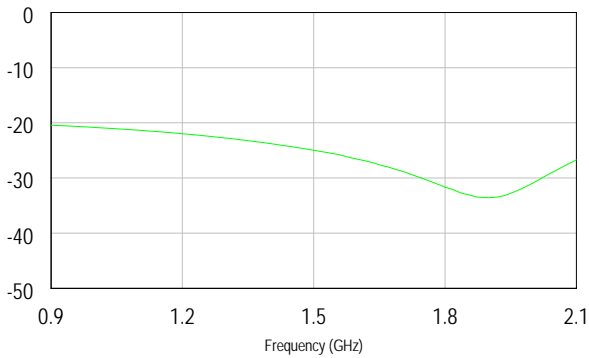
**COUPLING**



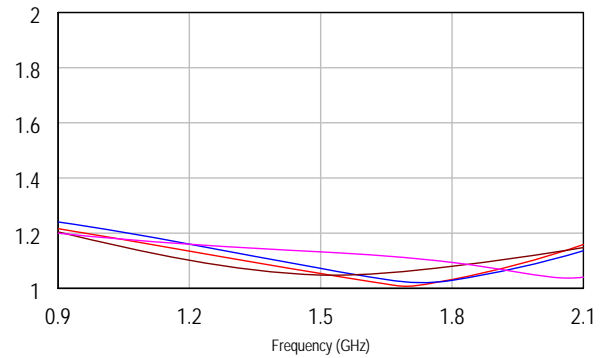
**INSERTION LOSS**



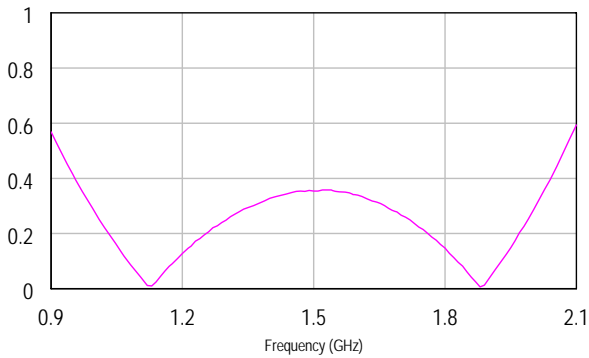
**ISOLATION**



**VSWR ALL PORTS**



**AMPLITUDE BALANCE**



**PHASE ERROR**

