

11306-3 Rev C

# Xinger.

## Hybrid Couplers 3 dB, 90°



#### **Description:**

The 11306-3 is a low profile 3dB hybrid coupler in an easy to use surface mount package covering 2.0 to 4.0 GHz. The 11306-3 is ideal for balanced amplifiers and signal distribution and can be used in most high power designs. Parts have been subjected to rigorous qualification testing and units are 100% tested. They are manufactured using materials with x and y thermal expansion coefficients compatible with common substrates such as FR4, G-10 and polyamide.

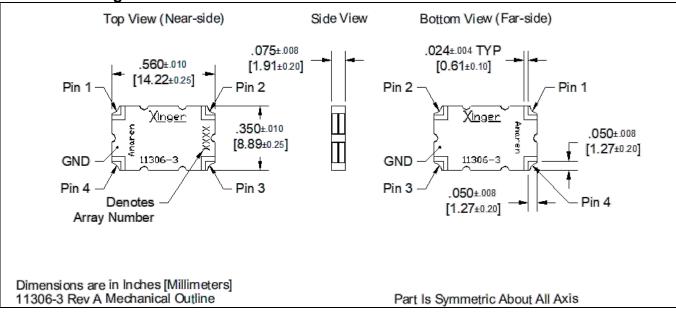
#### **Electrical Specifications\*\***

#### Features:

- 2.0 4.0 GHz
- Low loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

#### Insertion Frequency Isolation **VSWR** Loss GHz dB Min dB Max Max:1 2.0 - 4.020 0.35 1.30 Amplitude Phase Operating Power ΘJC **Balance Balance** Temp. dB Max Degrees Ave. CW Watts °C/ Watt °C ± 0.55 ± 5 60 24.6 -55 to +85

\*\*Specification based on performance of unit properly installed on microstrip printed circuit boards with 50 Ω nominal impedance. Specifications subject to change without notice.



#### Outline Drawing:

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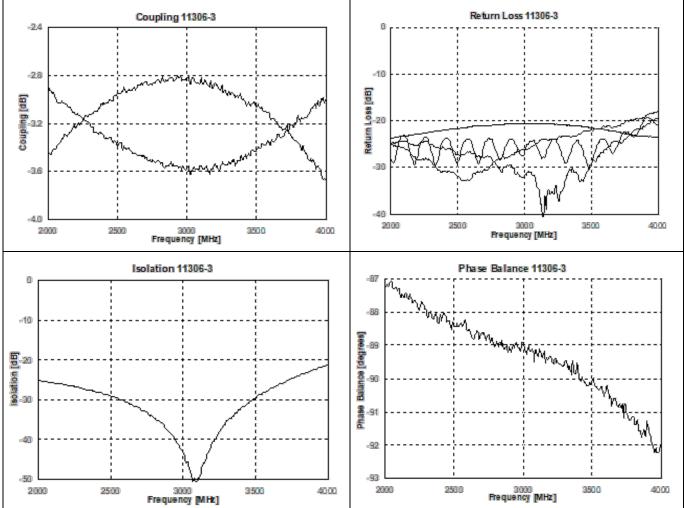
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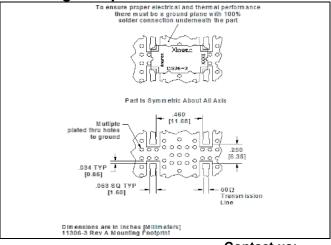
### Typical Performance: 2.0 GHz. to 4.0 GHz.



#### **Pin Configuration**

Pin 1		Pin 2		
		****		
	///~~	******		
Pin 4			Pin 3	
Hybrid Coupler Pin Configuration				
	Piri 1	Pin 2	Pîn 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90*	-3dB, 0*
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration //3	-3dB, -90°	-3dB, 01	Input	Isolated
Configuration #4	-3dB, 01	-3dB, -90*	Isolated	Input

#### **Mounting Footprint**



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