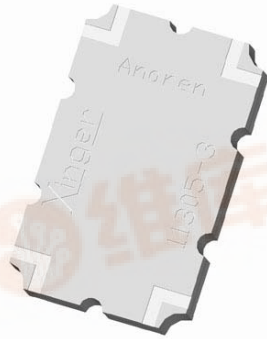


# Xinger®

## Hybrid Couplers 3 dB, 90°



### Description

The 11305-3 is a low profile 3dB hybrid coupler in an easy to use surface mount package covering 1.0 to 2.0 GHz. The 11305-3 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  $\alpha$  and  $\gamma$  thermal expansion coefficients compatible with common substrates such as FR4, G-10 and polyamide.

### Features:

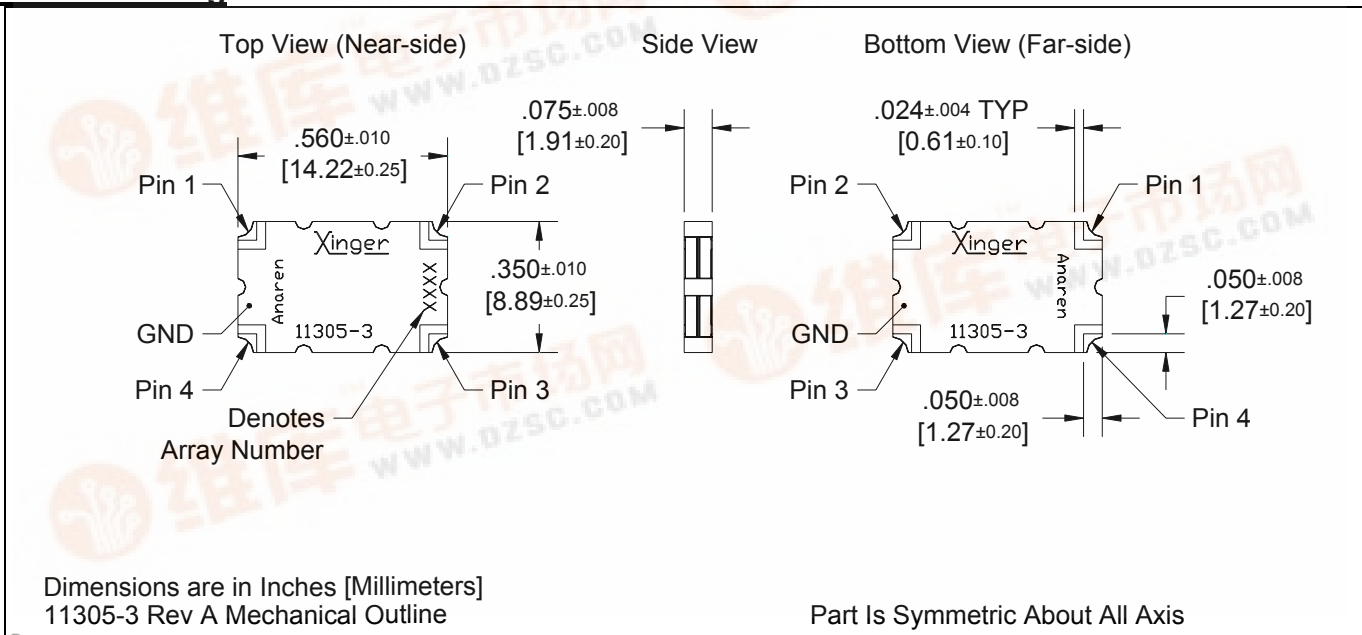
- 1.0 – 2.0 GHz
- Low Loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

### ELECTRICAL SPECIFICATIONS\*\*

Frequency	Isolation	Insertion Loss	VSWR	
GHz	dB Min	dB Max	Max:1	
1.0 – 2.0	20	0.45	1.30	
Amplitude Balance	Phase Balance	Power	ΘJC	Operating Temp.
dB Max	Degrees	Ave. CW Watts	°C/Watt	°C
± 0.55	± 3	60	18.6	-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

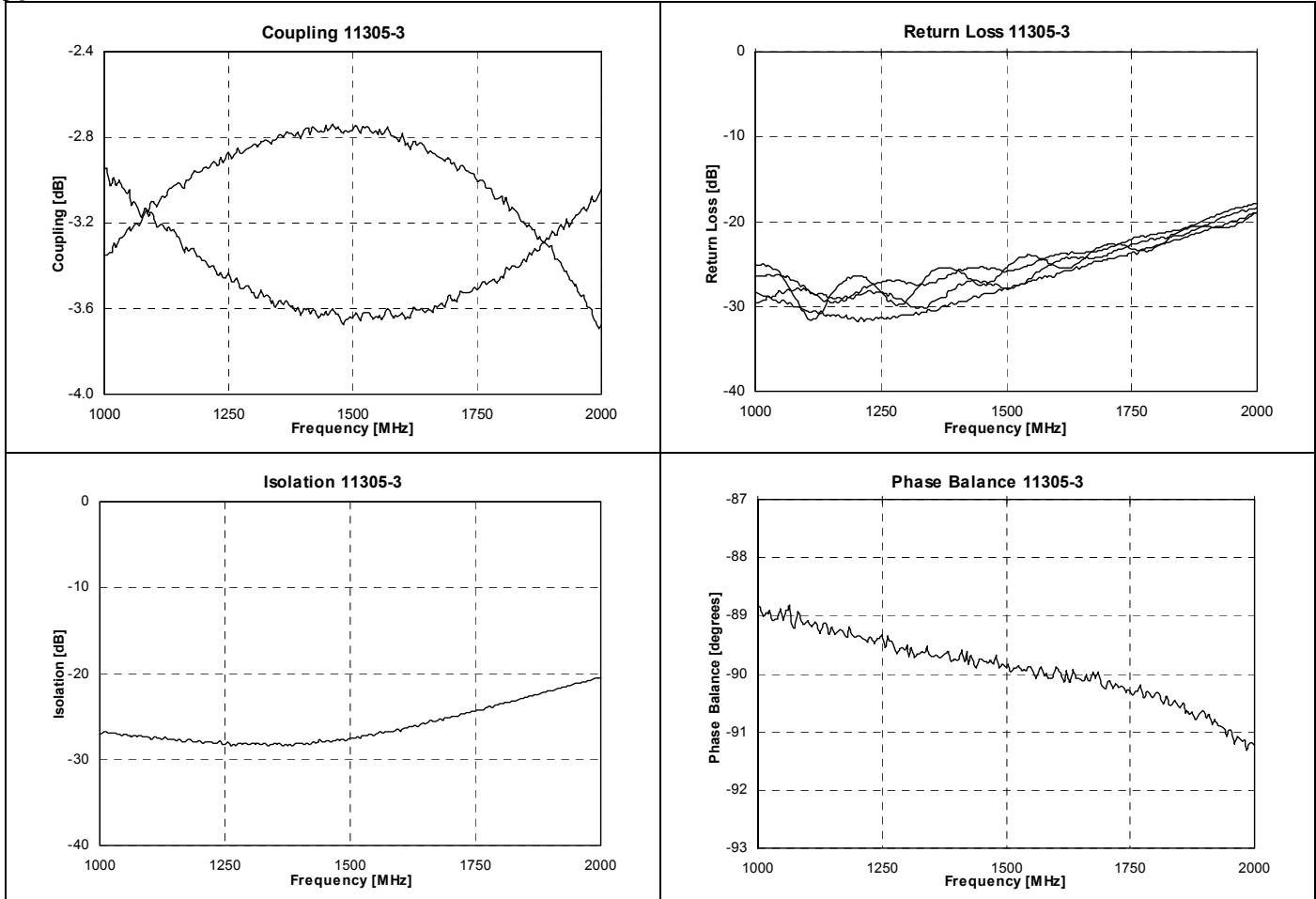


# Model 11305-3

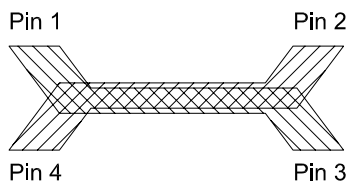
Rev. A



## Typical Performance: 1.0 GHz. to 2.0 GHz.



### Pin Configuration

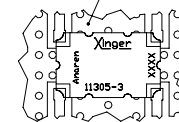


Hybrid Coupler Pin Configuration

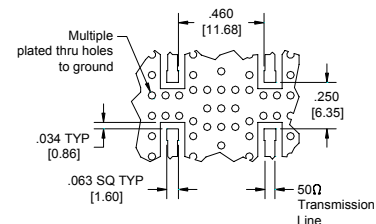
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90°	-3dB, 0°
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration #3	-3dB, -90°	-3dB, 0°	Input	Isolated
Configuration #4	-3dB, 0°	-3dB, -90°	Isolated	Input

### Mounting Footprint

To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part



Part Is Symmetric About All Axis



Dimensions are in Inches [Millimeters]  
11305-3 Rev A Mounting Footprint

