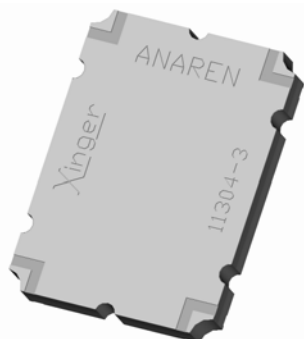


Xinger®

Hybrid Couplers 3 dB, 90°



Description

The 11304-3 is a low profile 3dB hybrid coupler in an easy to use surface mount package covering 500 to 1000 MHz. The 11304-3 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.

Features:

- 500 - 1000 MHz
- Low loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

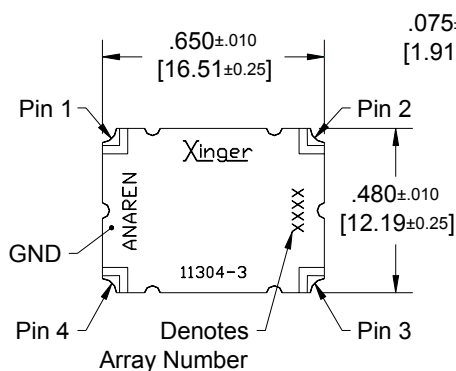
ELECTRICAL SPECIFICATIONS**

Frequency	Isolation	Insertion Loss	VSWR	
MHz	dB Min	dB Max	Max:1	
500 – 1000	20	0.35	1.25	
Amplitude Balance	Phase Balance	Power	ΘJC	Operating Temp.
dB Max	Degrees	Ave. CW Watts	°C/ Watt	°C
± 0.50	± 3	100	8.6	-55 to +85

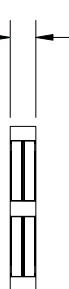
**Specification based on performance of unit properly installed on microstrip printed circuit boards with 50 Ω nominal impedance. Specifications subject to change without notice.

Outline Drawing

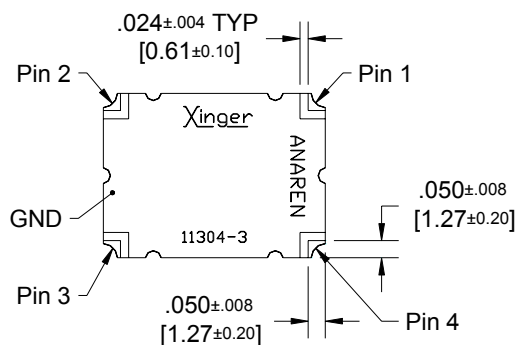
Top View (Near-side)



Side View



Bottom View (Far-side)

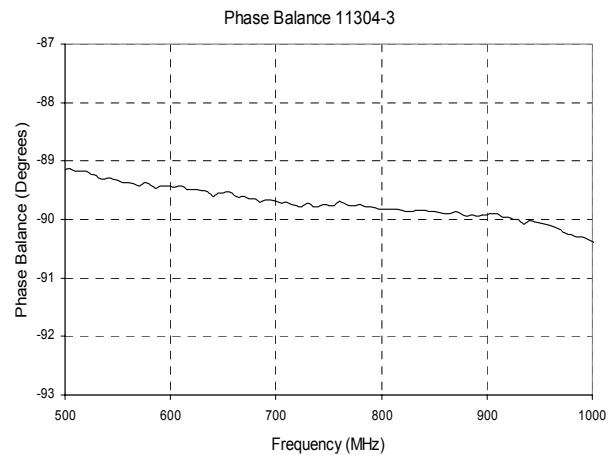
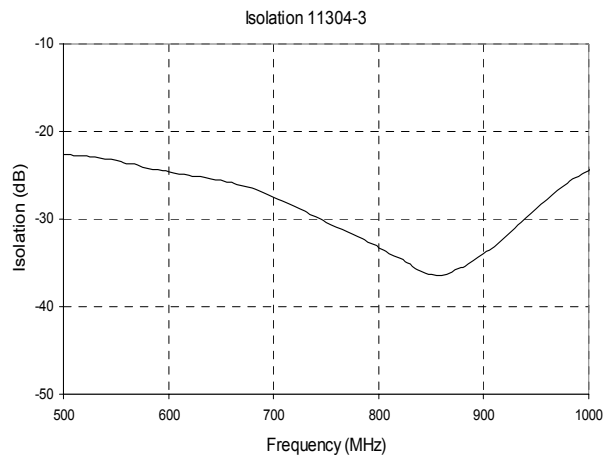
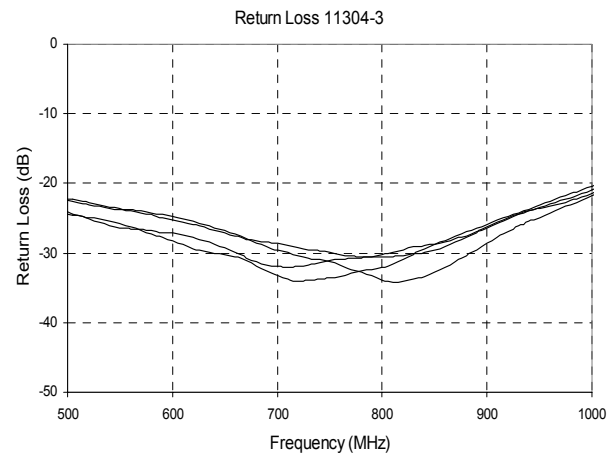
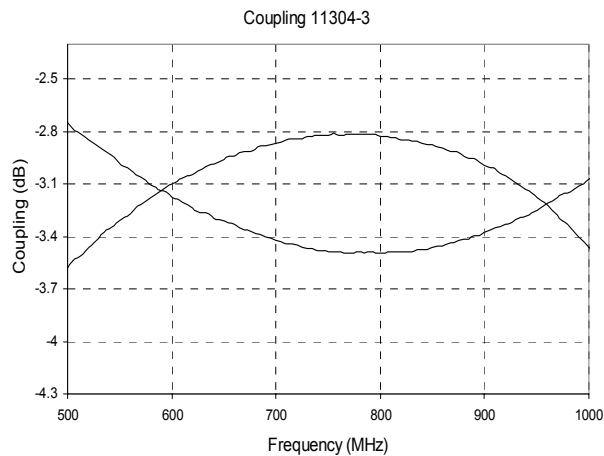


Dimensions are in Inches [Millimeters]
11304-3 Rev A Mechanical Outline

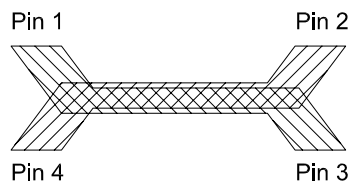
Part Is Symmetric About All Axis



Typical Performance: 500 MHz. to 1000 MHz.



Pin Configuration

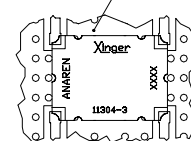


Hybrid Coupler Pin Configuration

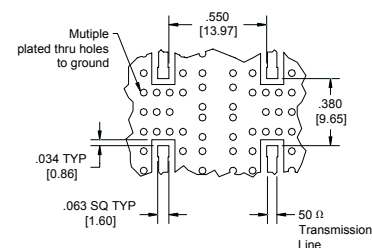
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90°	-3dB, 0°
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration #3	-3dB, -90°	-3dB, 0°	Input	Isolated
Configuration #4	-3dB, 0°	-3dB, -90°	Isolated	Input

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]
11304-3 Rev A Mounting Footprint

