

Xinger®

Hybrid Couplers 3 dB, 90°



Description

The 1A1305-3 is a low profile 3dB hybrid coupler in an easy to use surface mount package covering the entire DCS and PCS bands. The 1A1305-3 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:

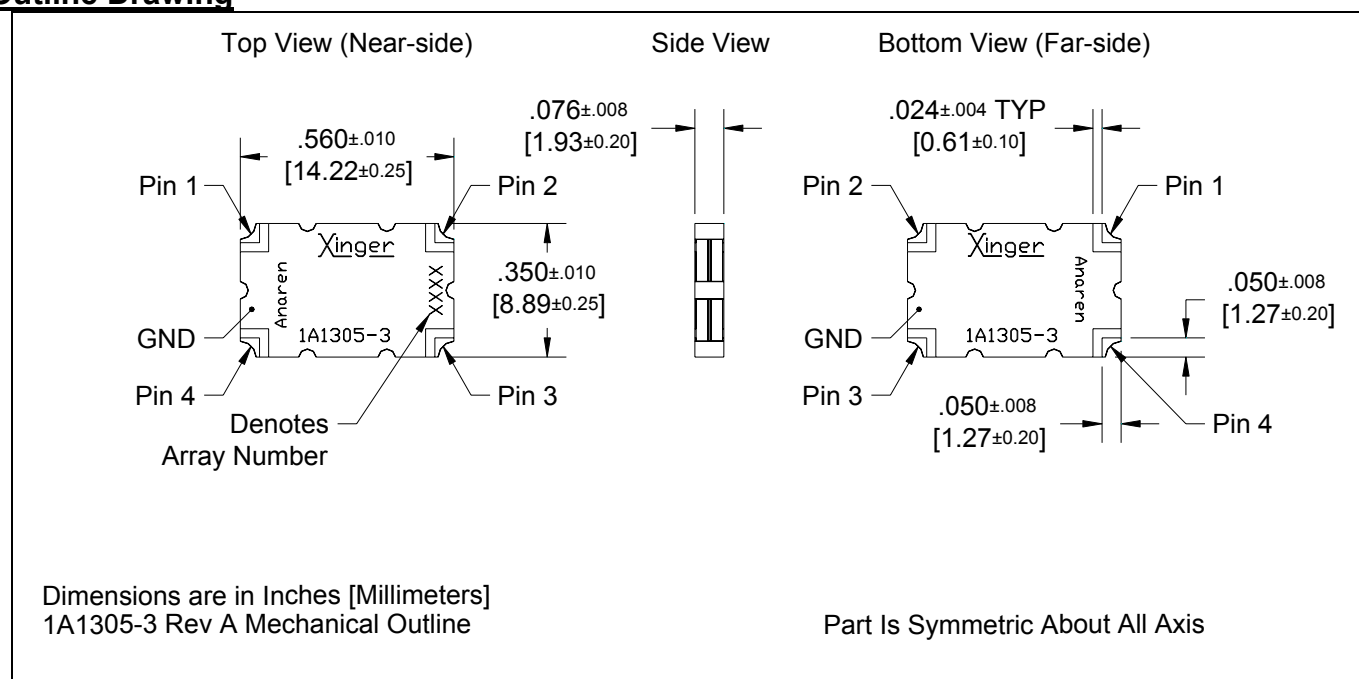
- 1.5 – 2.2 GHz
- Low Loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

ELECTRICAL SPECIFICATIONS**

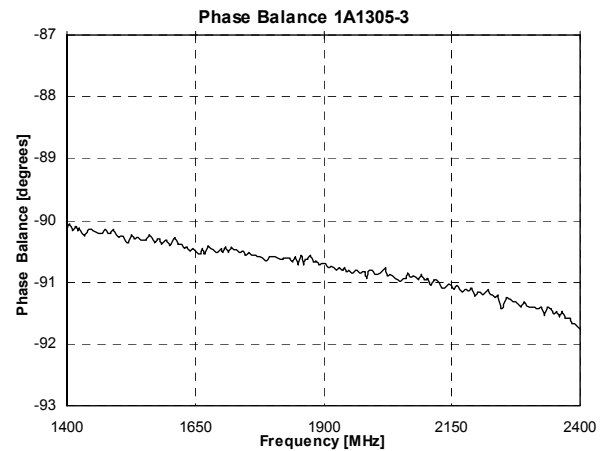
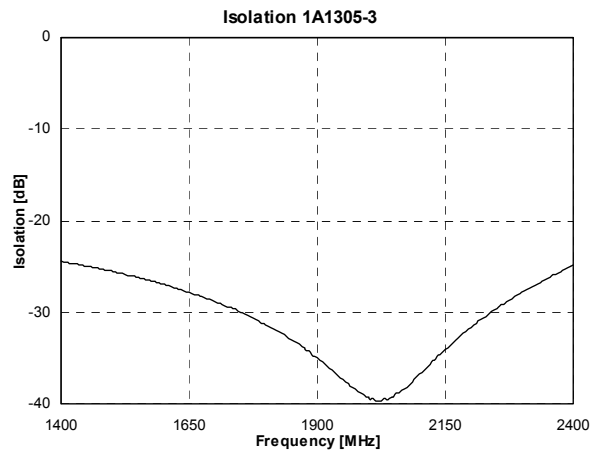
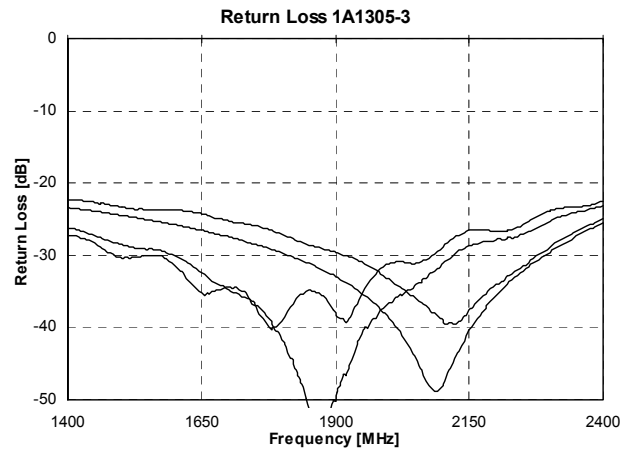
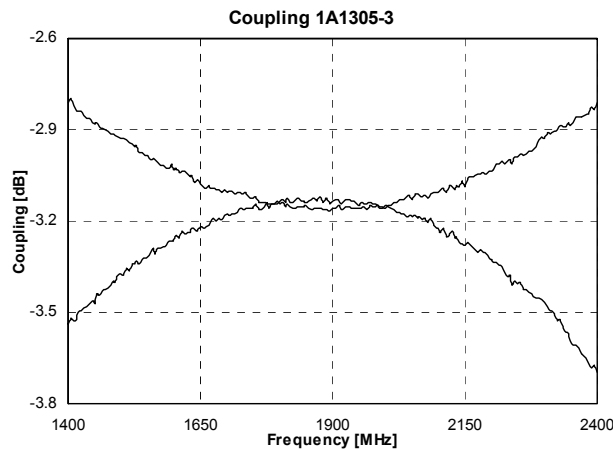
Frequency	Isolation	Insertion Loss	VSWR	
MHz	dB Min	dB Max	Max:1	
1.7 – 2.0	23	0.23	1.18	
1.5 – 2.2	20	0.25	1.20	
Amplitude Balance	Phase Balance	Power	ΘJC	Operating Temp.
dB Max	Degrees	Ave. CW Watts	°C/Watt	°C
± 0.30	± 3	100	14.6	-55 to +85
± 0.40	± 3	100	14.6	-55 to +85

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

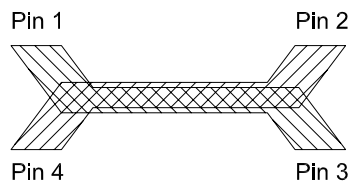
Outline Drawing



Typical Performance: 1.4 GHz. to 2.4 GHz.



Pin Configuration

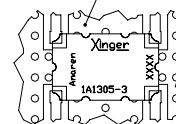


Hybrid Coupler Pin Configuration

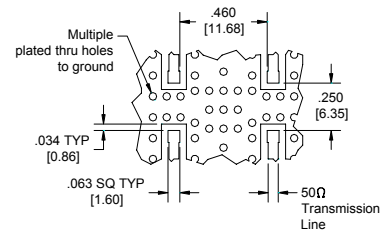
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90°	-3dB, 0°
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration #3	-3dB, -90°	-3dB, 0°	Input	Isolated
Configuration #4	-3dB, 0°	-3dB, -90°	Isolated	Input

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]
1A1305-3 Rev A Mounting Footprint

USA/Canada: (315) 432-8909
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Available on Tape and
Reel For Pick and Place
Manufacturing.



Anaren
What'll we think of next?