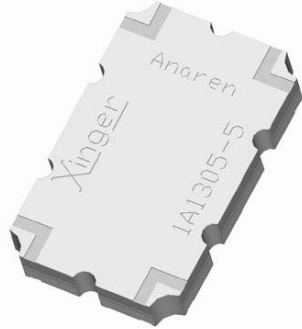


Xinger®

Directional Couplers 5 dB



Description

The 1A1305-5 is a low profile 5dB directional coupler in an easy to use surface mount package covering the DCS and PCS bands. The 1A1305-5 is ideal for 3 way inline split/combine amplifiers and for power injection 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:

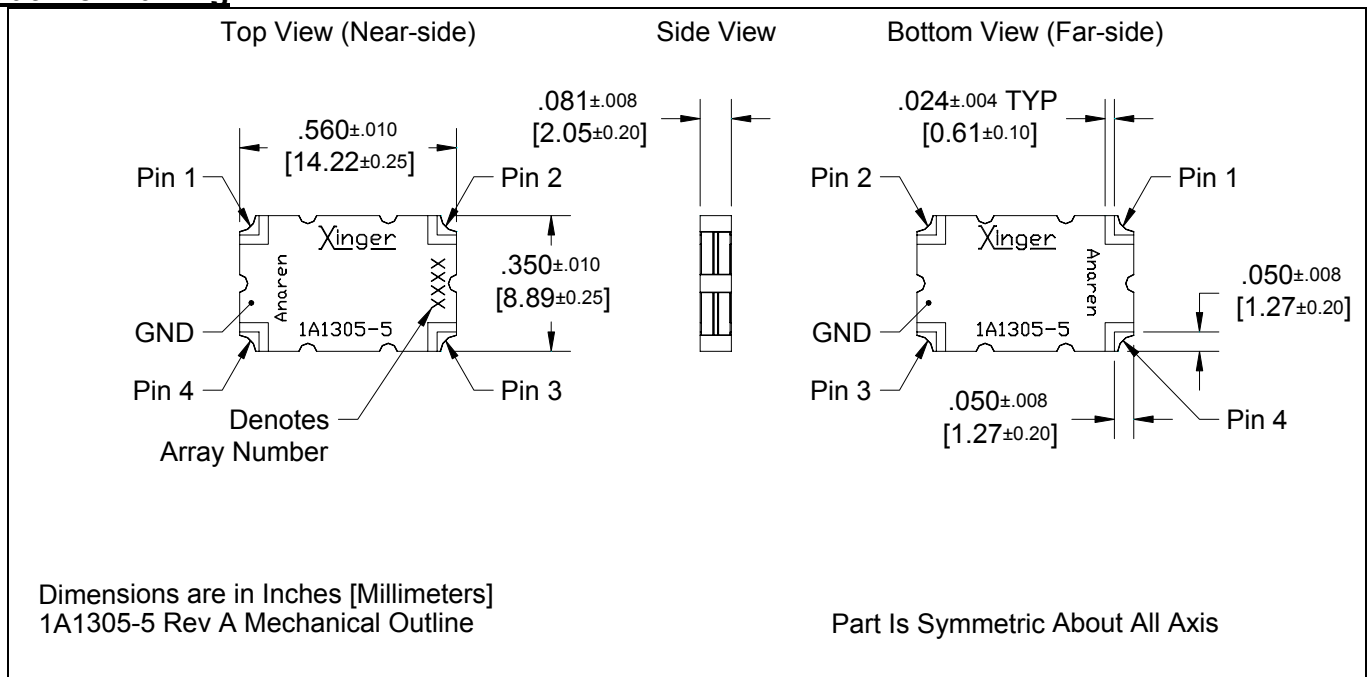
- 1.5 - 2.2GHz
- Low loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

ELECTRICAL SPECIFICATIONS**

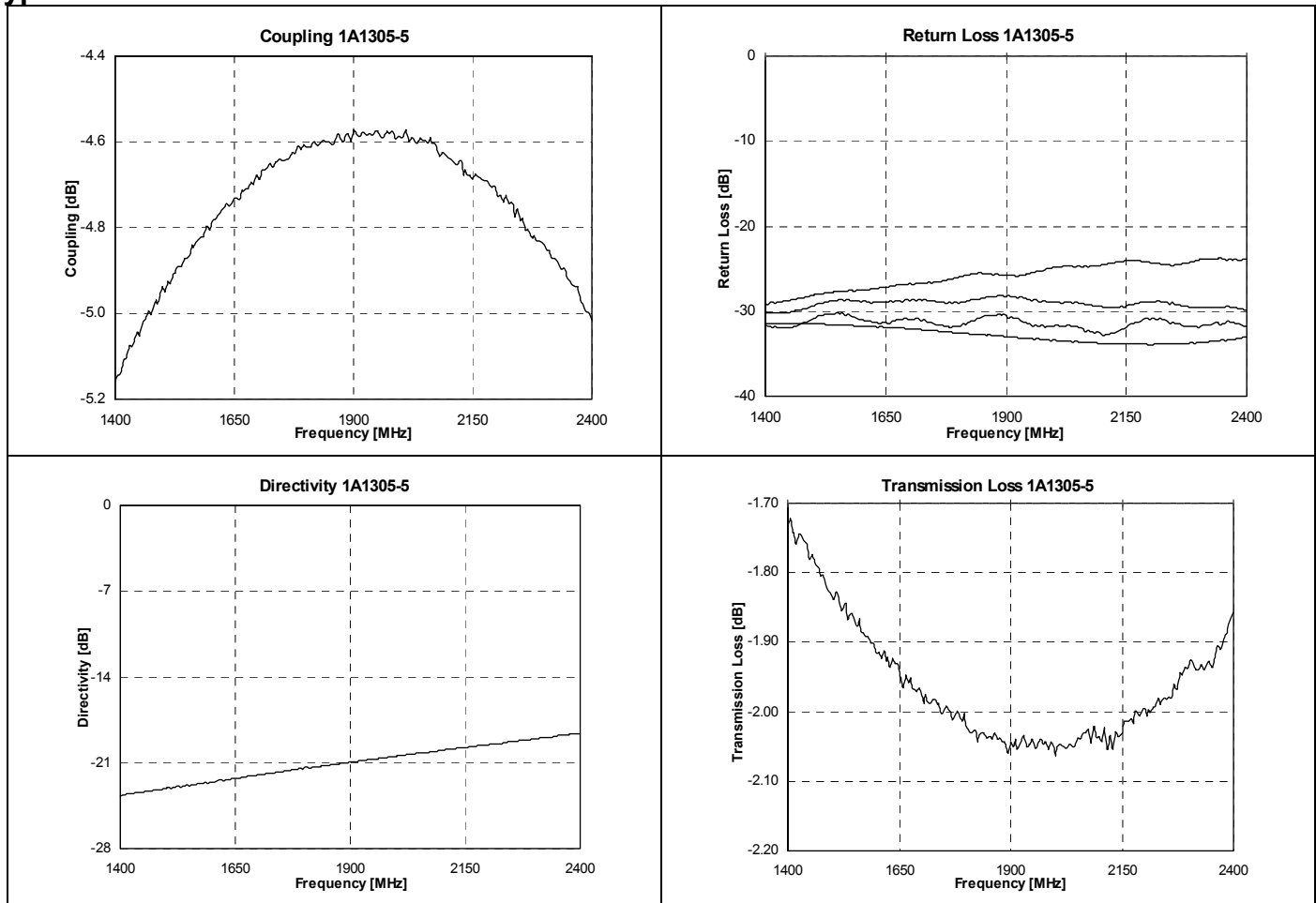
Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
GHz	dB	dB Max	Max:1	dB Max
1.7 – 2.0	5.0 ± 0.4	0.25	1.20	±0.20
1.5 – 2.2	5.1 ± 0.5	0.25	1.20	±0.30
Directivity	Power Handling	⊙JC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
16	100	16.5	-55 to +85	
15	100	16.5	-55 to +85	

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

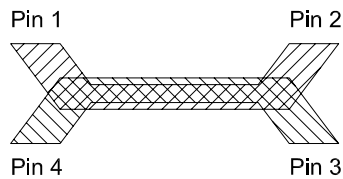
Outline Drawing



Typical Performance: 1.4 GHz. to 2.4 GHz.



Pin Configuration

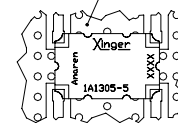


Directional Coupler Pin Configuration

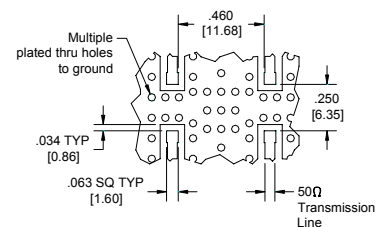
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Output	Isolated	Coupled
Configuration #2	Output	Input	Coupled	Isolated
Configuration #3	Isolated	Coupled	Input	Output
Configuration #4	Coupled	Isolated	Output	Input

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]
1A1305-5 Rev A Mounting Footprint

USA/Canada: (315) 432-8909
Toll Free: (800) 544-2414
Europe: +44 2392-232392

Available on Tape and Reel For Pick and Place Manufacturing.

