

Directional Couplers 6 dB

Xinger®



Description

The 1A1305-6 is a low profile 6dB directional coupler in an easy to use surface mount package covering the DCS and PCS bands. The 1A1305-6 is ideal for 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:

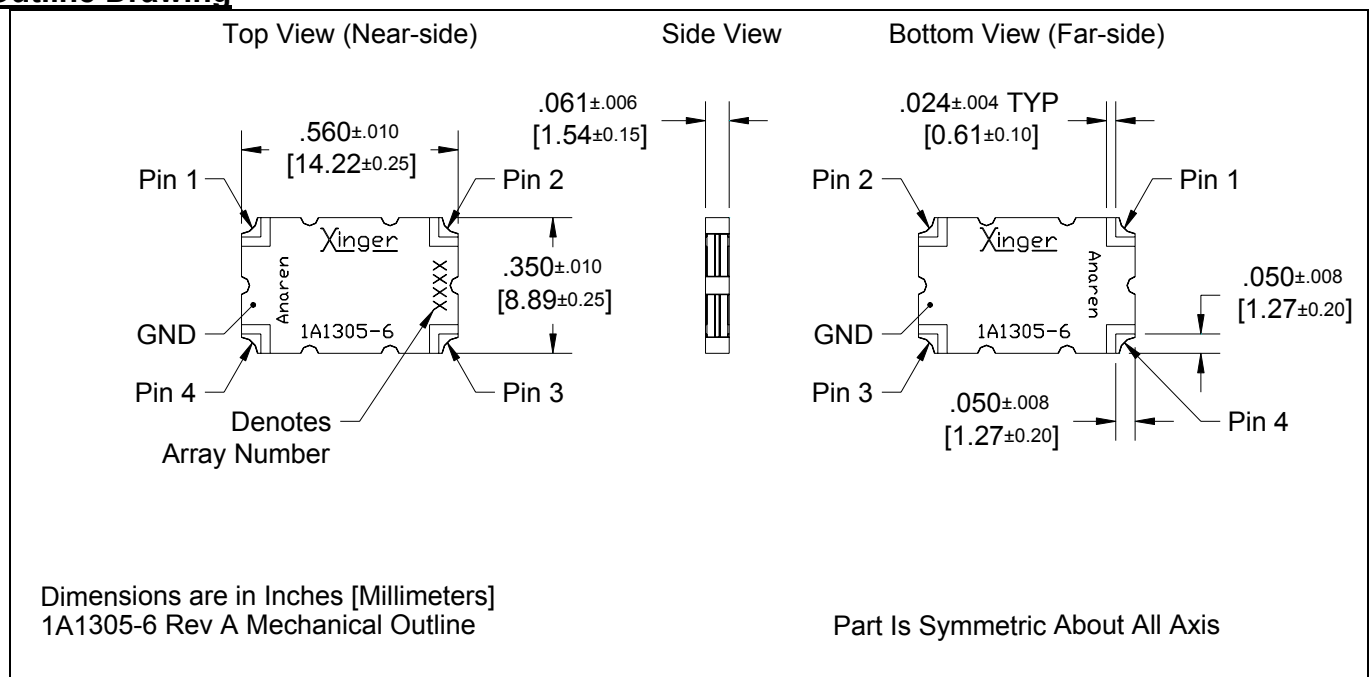
- 1.5 - 2.2GHz
- Low loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

ELECTRICAL SPECIFICATIONS**

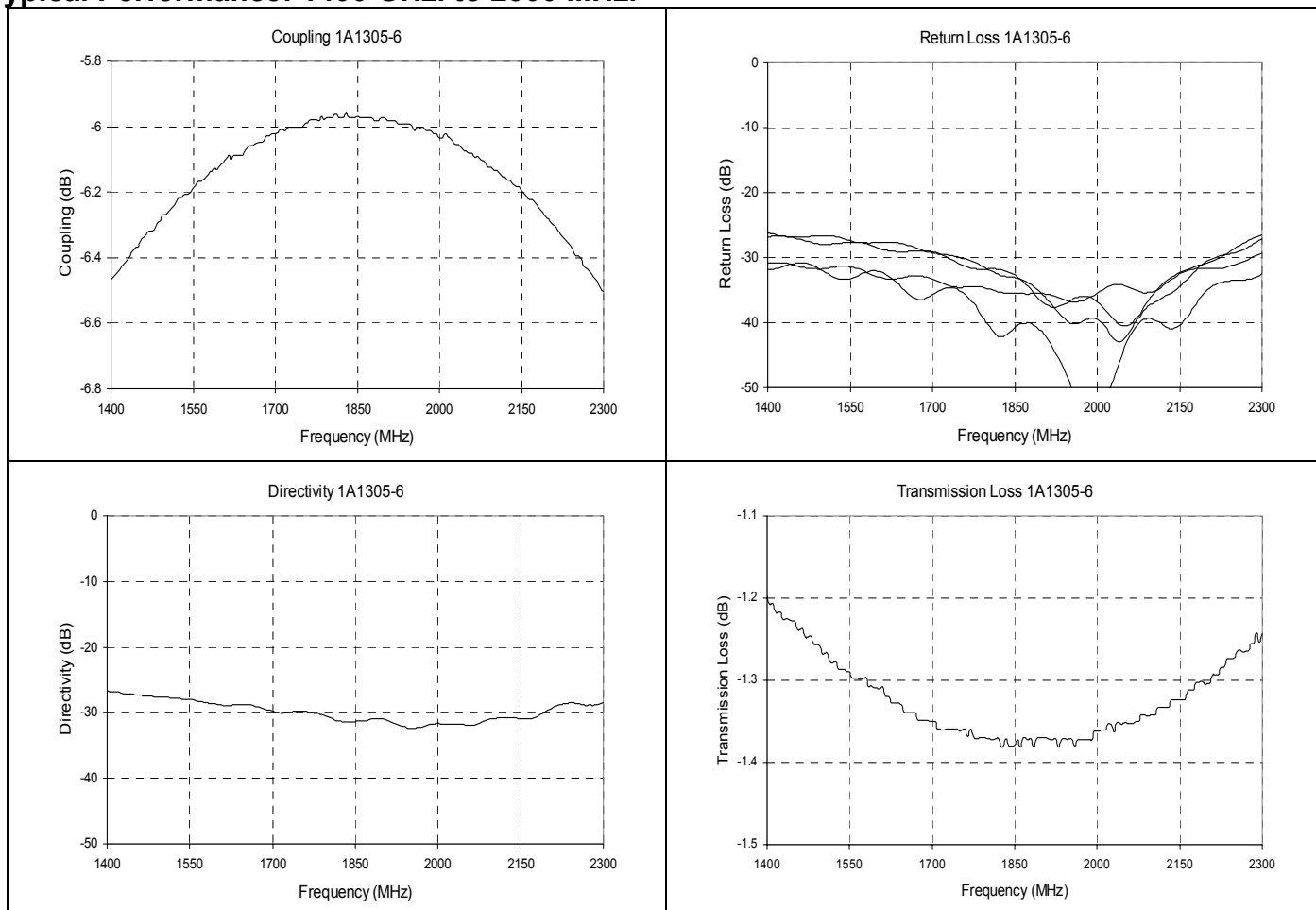
Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
GHz	dB	dB Max	Max:1	dB Max
1.7 – 2.0	6.0 ± 1.0	0.30	1.18	±0.20
1.5 – 2.2	6.0 ± 1.0	0.30	1.18	±0.30
Directivity	Power Handling	⊙JC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
20	100	15.1	-55 to +85	
20	100	15.1	-55 to +85	

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

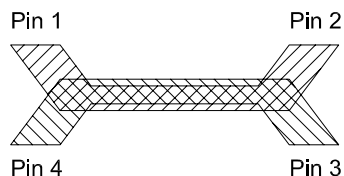
Outline Drawing



Typical Performance: 1400 GHz. to 2300 MHz.



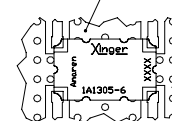
Pin Configuration



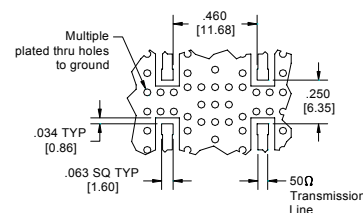
Directional Coupler Pin Configuration				
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Output	Isolated	Coupled
Configuration #2	Output	Input	Coupled	Isolated
Configuration #3	Isolated	Coupled	Input	Output
Configuration #4	Coupled	Isolated	Output	Input

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]
1A1305-6 Rev A Mounting Footprint

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Available on Tape and Reel For Pick and Place Manufacturing.

