

# Xinger®

## Directional Couplers 5 dB



### Description

The 1D1304-5 is a low profile 5dB directional coupler in an easy to use surface mount package covering the AMPS and GSM bands. The 1D1304-5 is ideal for 3 way inline split/combine<sup>1</sup> 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:

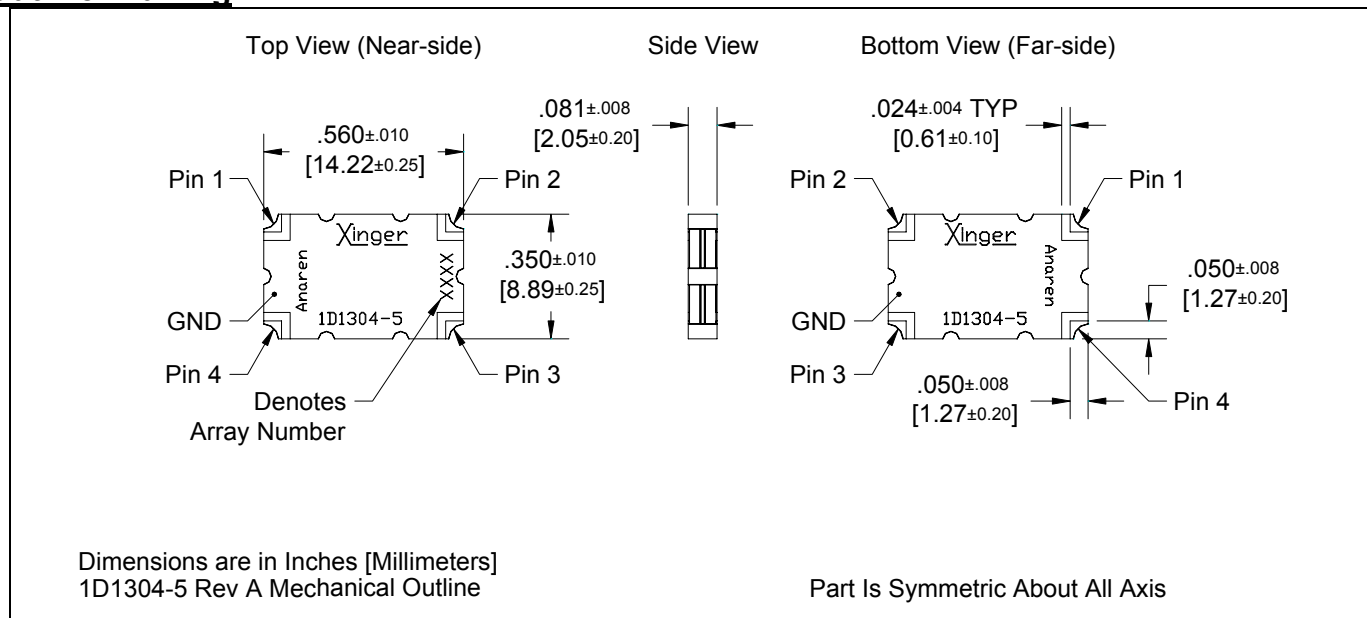
- 800 – 1200 MHz
- Low loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

### ELECTRICAL SPECIFICATIONS\*\*

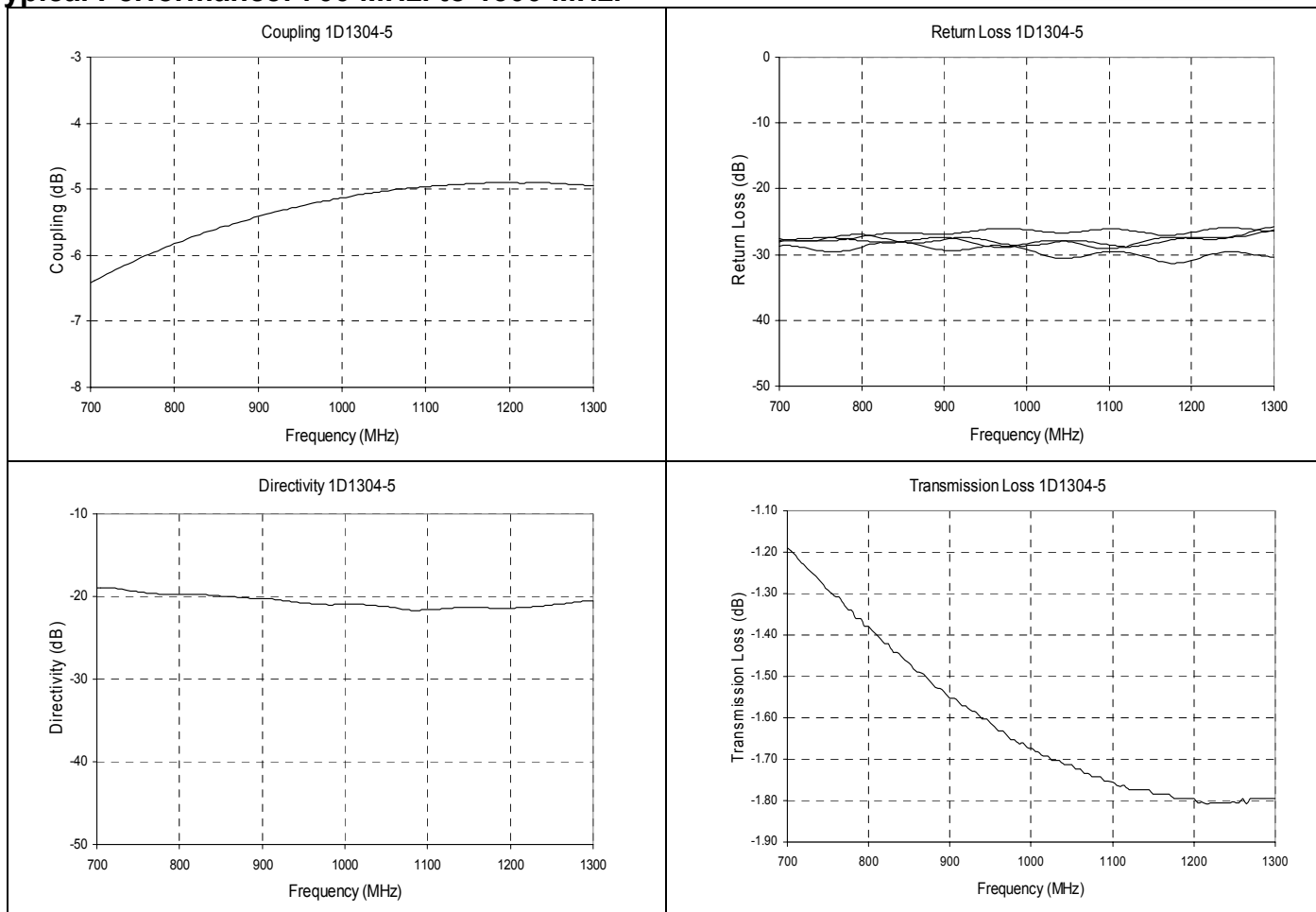
Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
MHz	dB	dB Max	Max:1	dB Max
815 - 960	4.8 ± 1.0	0.25	1.17	±0.40
800 - 1200	4.8 ± 1.0	0.25	1.17	±0.60
Directivity	Power Handling	ΘJC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
18	150	11.6	-55 to +85	
17	150	11.6	-55 to +85	

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

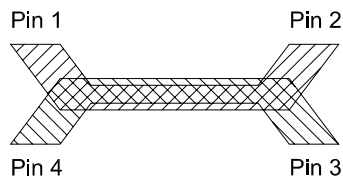
### Outline Drawing



### Typical Performance: 700 MHz. to 1300 MHz.



### Pin Configuration

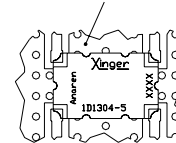


Directional Coupler Pin Configuration

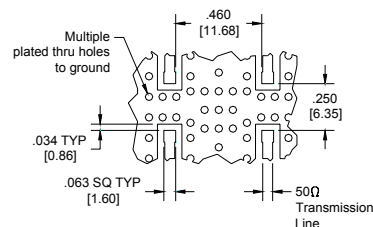
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Output	Isolated	Coupled
Configuration #2	Output	Input	Coupled	Isolated
Configuration #3	Isolated	Coupled	Input	Output
Configuration #4	Coupled	Isolated	Output	Input

### 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]  
1D1304-5 Rev A Mounting Footprint

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Available on Tape and Reel For Pick and Place Manufacturing.

