







#### **Description**

The 1A1305-15 is a low profile 15dB directional coupler in an easy to use surface mount package covering the DCS and PCS bandwidths. The 1A1305-15 is ideal for power and frequency detection as well as VSWR monitoring 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:

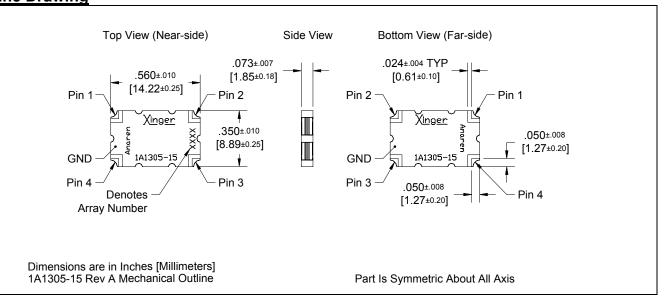
- 1.5 2.2 GHz
- Low loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

### **ELECTRICAL SPECIFICATIONS\*\***

Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
GHz	dB	dB Max	Max:1	dB Max
1.7 – 2.0	15.0 ± 1.5	0.25	1.20	±0.20
1.5 - 2.2	15.0 ± 1.5	0.25	1.20	±0.30
Directivity	Power Handling	ΘJC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
20	100	13.0	-55 to +85	
20	100	13.0	-55 to +85	

<sup>\*\*</sup>Specification based on performance of unit properly installed on microstrip printed circuit boards with 50  $\Omega$  nominal impedance. Specifications subject to change without notice.

## **Outline Drawing**







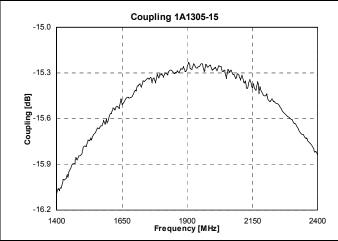
Available on Tape and Reel For Pick and Place Manufacturing.

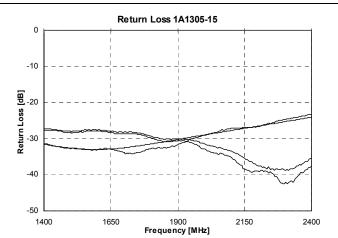
USA/Canada: (315) 432-8909 Toll Free: (800) 544-2414 Europe: +44 2392-232392

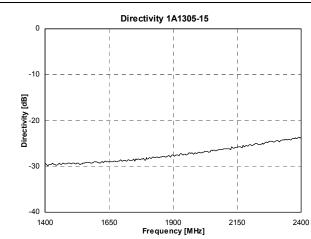


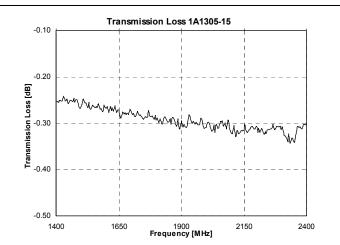
# Xinger<sub>®</sub>

**Typical Performance: 1.4 GHz. to 2.4 GHz.** 

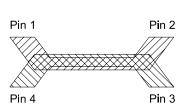




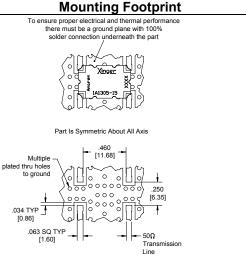




**Pin Configuration** 



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		



Dimensions are in Inches [Millimeters] 1A1305-15 Rev A Mounting Footprint

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