







### **Description**

The 1G1304-30 is a low profile 30dB directional coupler in an easy to use surface mount package covering the AMPS and GSM bands. The 1G1304-30 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:

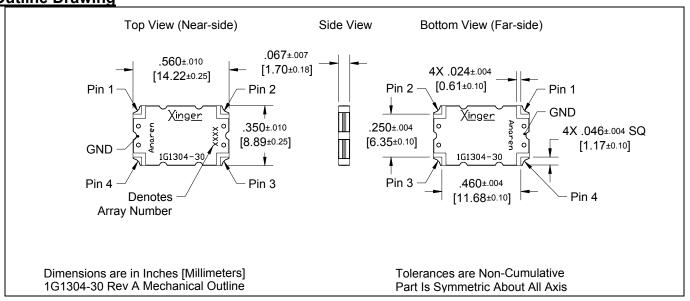
- 800 1000 MHz
- Low loss
- High Directivity
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested
- Lead Free Finish

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

Frequency	Mean Coupling	Insertion Loss	VSWR	Freq. Sensitivity
MHz	dB	dB Max	Max:1	dB Max
869 - 894	30 ± 1.5	0.25	1.20	±0.10
800 - 1000	30 ± 1.5	0.25	1.27	±0.30
Directivity	Power Handling	ΘJC	Operating Temp.	
dB Min	Watts	°C / Watt	°C	
18	150	20.3	-55 to +85	
18	150	20.3	-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**







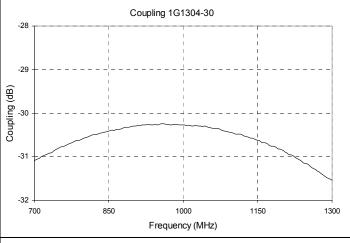
Available on Tape and Reel For Pick and Place Manufacturing.

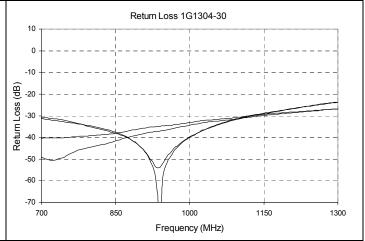
USA/Canada: (315) 432-8909 Toll Free: (800) 544-2414 Europe: +44 2392-232392

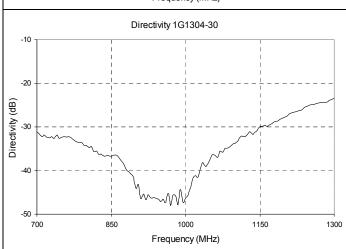


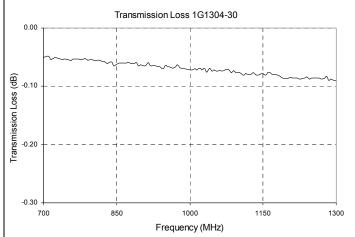


# Typical Performance: 700 MHz. to 1300 MHz.

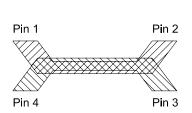






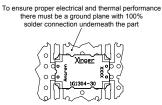


### **Pin Configuration**

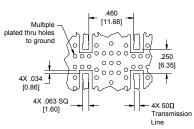


Directional Coupler Pin Configuration						
Pin 1	Pin 2	Pin 3	Pin 4			
Input	Output	Isolated	Coupled			
Output	Input	Coupled	Isolated			
Isolated	Coupled	Input	Output			
Coupled	Isolated	Output	Input			
	Pin 1 Input Output Isolated	Pin 1 Pin 2 Input Output Output Input Isolated Coupled	Pin 1 Pin 2 Pin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

# **Mounting Footprint**



Part Is Symmetric About All Axis



Dimensions are in Inches [Millimeters] 1G1304-30 Rev A Mounting Footprint

USA/Canada: Toll Free: Europe:

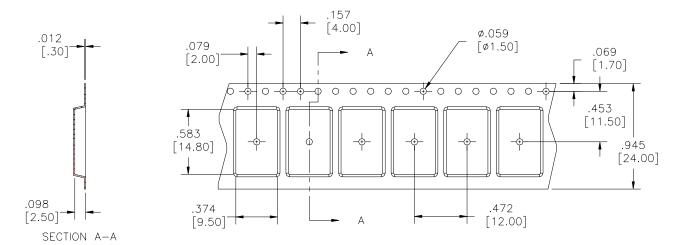
(315) 432-8909 (800) 544-2414 +44 2392-232392

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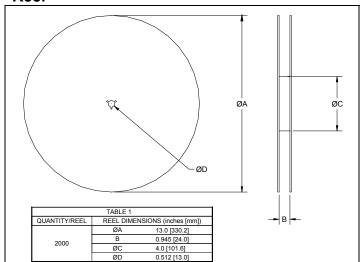




## **Carrier Tape**



### Reel



- Parts are available in both reel and tube
- Quantity of 30 parts available per tube



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