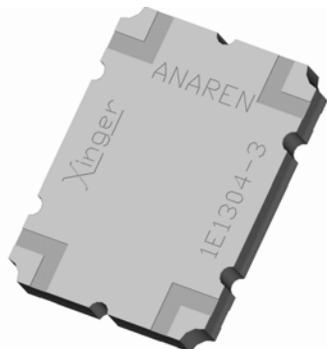


Xinger®

Hybrid Couplers 3 dB, 90°



Description

The 1E1304-3 is a low profile 3dB hybrid coupler in an easy to use surface mount package for AMPS, GSM, IDEN and EDGE applications. The 1E1304-3 is ideal for balanced amplifiers and signal distribution and is an ideal solution for the ever increasing demands of the wireless industry for smaller printed circuit boards. Parts have been subjected to rigorous qualification and units are 100% tested. They are manufactured using materials with x and y thermal expansion coefficients compatible with common substrates.

Features:

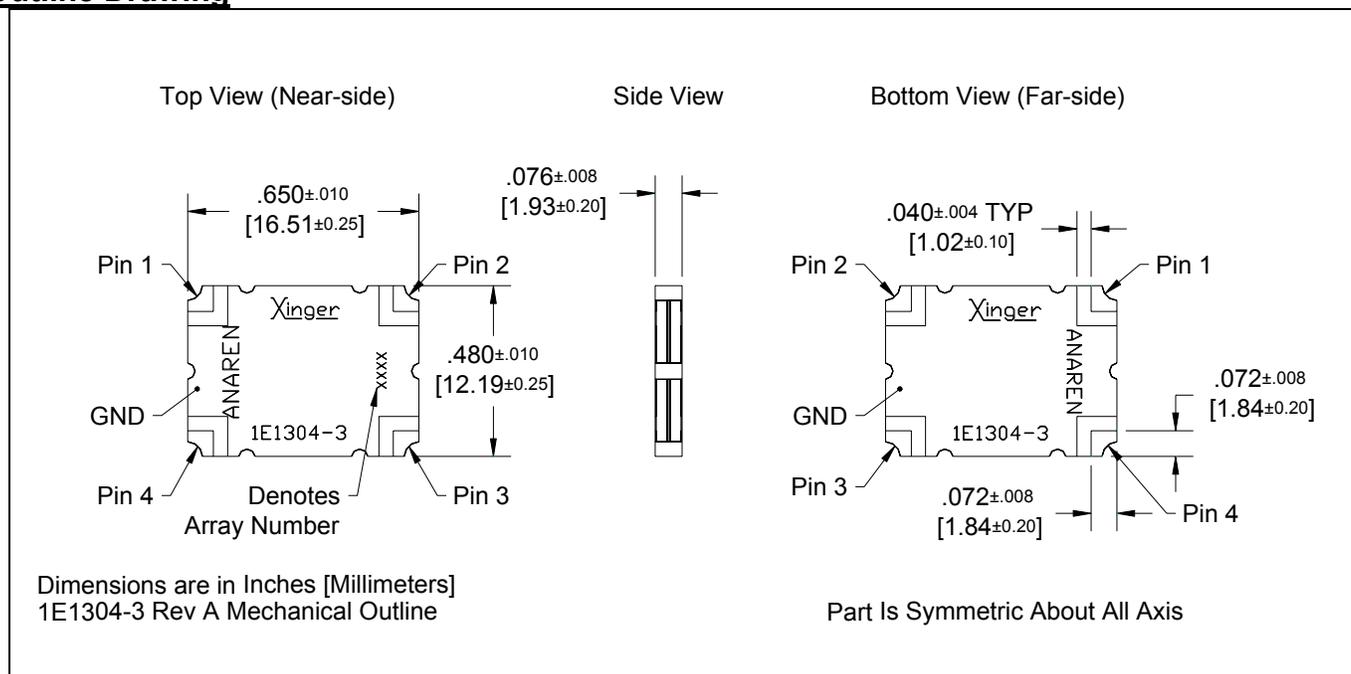
- 730 – 960 MHz
- Low loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested

ELECTRICAL SPECIFICATIONS**

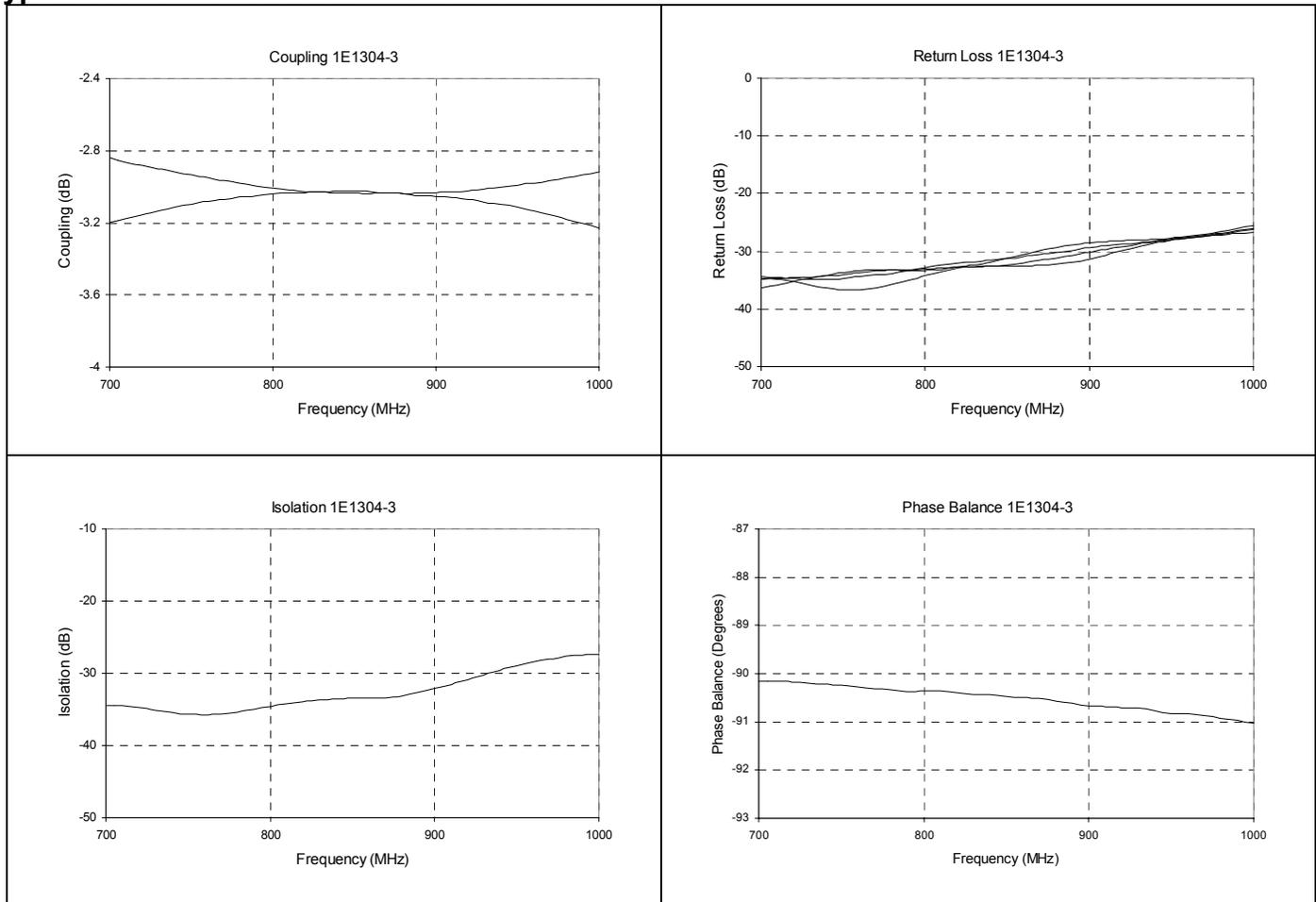
Frequency	Isolation	Insertion Loss	VSWR		
MHz	dB Min	dB Max	Max:1		
730 - 960	22	.25	1.18		
Amplitude Balance	Phase Balance	Power	ΘJC	Operating Temp.	
dB Max	Degrees	Ave. CW Watts	°C/ Watt	°C	
± 0.20	± 3	150	10.4	-55 to +85	

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

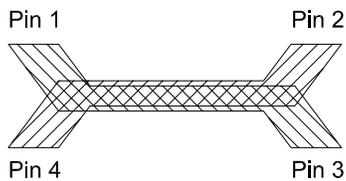
Outline Drawing



Typical Performance: 700 MHz. to 1000 MHz.



Pin Configuration

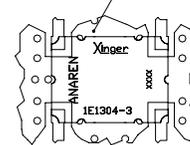


Hybrid Coupler Pin Configuration

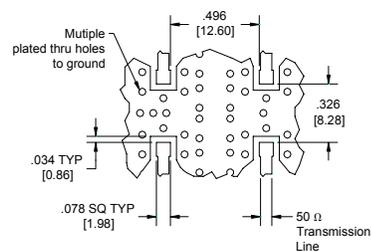
	Pin 1	Pin 2	Pin 3	Pin 4
Configuration #1	Input	Isolated	-3dB, -90°	-3dB, 0°
Configuration #2	Isolated	Input	-3dB, 0°	-3dB, -90°
Configuration #3	-3dB, -90°	-3dB, 0°	Input	Isolated
Configuration #4	-3dB, 0°	-3dB, -90°	Isolated	Input

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]
1E1304-3 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.

