



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 run through rigorous qualification and units are 100% tested. They are manufactured using materials with x and y thermal expansion coefficients compatible with common substrates.

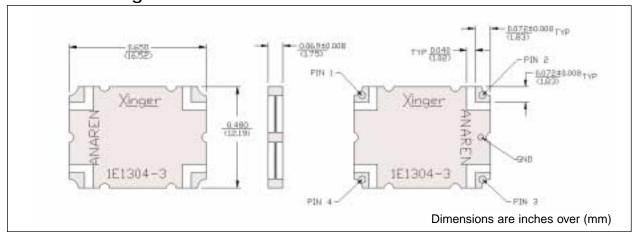
Features

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

| Electrical Specifications | | | | | | |
|---------------------------|--|--|--|--|--|--|
| Isolation dB Min | Insert. Loss dB Max | VSWR Max : 1 | | | | |
| 22 | 0.25 | 1.18 | | | | |
| Phase Bal. Degrees Max | $\Theta_{	extsf{JC}}$ (°C/diss. Watt) | Avg. Power CW [Watts] | | | | |
| 3 | 10.4 | 150 | | | | |
| | Isolation dB Min 22 Phase Bal. Degrees Max | Isolation dB Min 22 0.25 Phase Bal. Degrees Max Insert. Loss dB Max Degrees Max Degrees Max | | | | |

Specifications subject to change without notice.

Outline Drawing





Available on Tape and Reel for Pick and Place Manufacturing.

Sales Desk USA: Voice: (800) 544-2414 Fax: (315) 432-9121 Sales Desk Europe: Voice: (+44) 23 92 232392 Fax: (+44) 23 92 251369



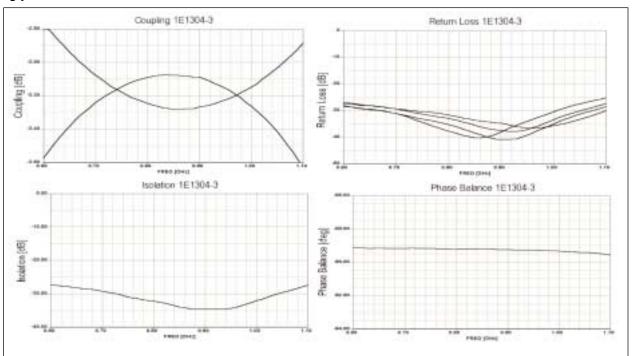
Model 1E1304-3



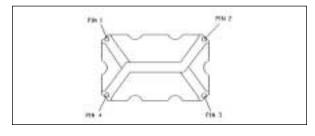
www.anaren.com

Typical Performance



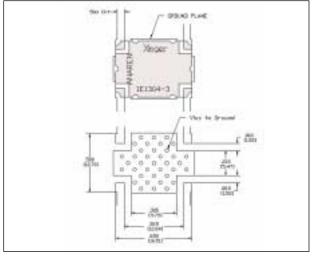


Pin Configuration



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

Mounting Footprint



Available on Tape and Reel for Pick and Place Manufacturing.





Sales Desk USA: Voice: (800) 544-2414 Fax: (315) 432-9121 Sales Desk Europe: Voice: (+44) 23 92 232392 Fax: (+44) 23 92 251369