



Hybrid Coupler 3 dB, 90°



### **Description:**

The 11305-3S is a low profile 3dB hybrid coupler in an easy to use surface mount package covering 1.0 to 2.0 GHz. The 11305-3S is ideal for balanced amplifiers and signal distribution 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:

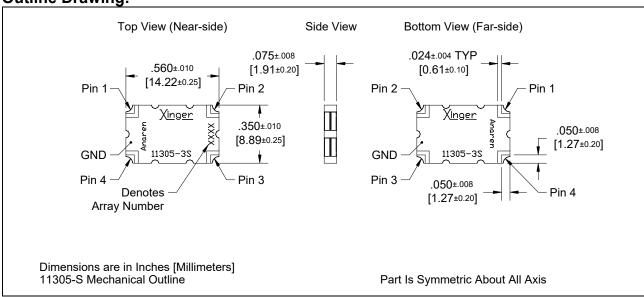
- 1.0 2.0 GHz
- Low Loss
- High Isolation
- 90° Quadrature
- Surface Mountable
- Tape And Reel
- Convenient Package
- 100% Tested
- Lead Free

**Detailed Electrical Specifications:** 

| Frequency            | Isolation        | Insertion<br>Loss | VSWR    |                    |
|----------------------|------------------|-------------------|---------|--------------------|
| GHz                  | dB Min           | dB Max            | Max:1   |                    |
| 1.0 – 2.0            | 20               | 0.45              | 1.30    |                    |
| Amplitude<br>Balance | Phase<br>Balance | Power             | ΘJC     | Operating<br>Temp. |
| dB Max               | Degrees          | Ave. CW Watts     | °C/Watt | °C                 |
| ± 0.55               | ± 3              | 60                | 18.6    | -55 to +85         |

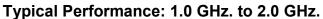
<sup>\*\*</sup>Specification based on performance of unit properly installed on microstrip printed circuit boards with 50  $\Omega$  nominal impedance.

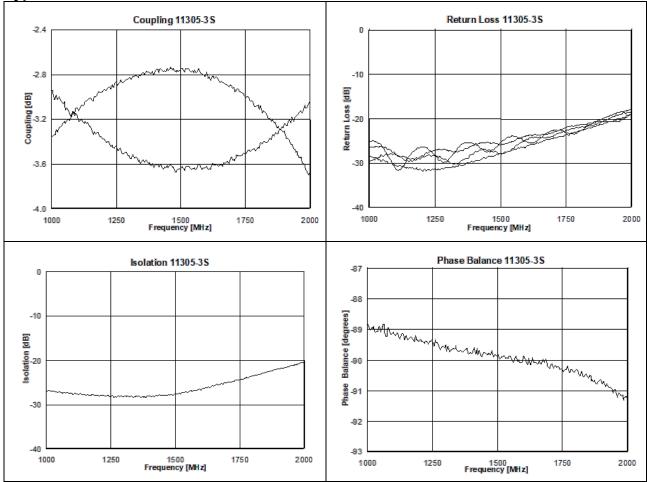
### **Outline Drawing:**



<sup>\*</sup>Specifications subject to change without notice.



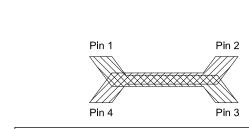




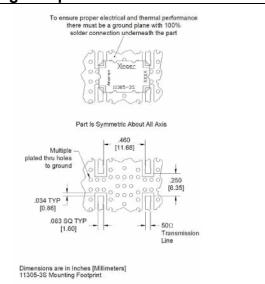


# **Pin Configuration**

## **Mounting Footprint**



| Hybrid Coupler Pin Configruation |            |            |            |            |  |  |  |
|----------------------------------|------------|------------|------------|------------|--|--|--|
|                                  | 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      |  |  |  |



Contact us:

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