





# Balun Transformers $50\Omega$ to $25\Omega$ Balanced

# **Description**

The 3A525 is a low profile balanced to unbalanced transformer in an easy to use surface mount package covering Japanese PDC, DCS and PCS receive push-pull amplifier and mixer applications. The 3A525 has an unbalanced impedance of  $50\Omega$  and a balanced port impedances of  $25\Omega$  to ground with  $50\Omega$  balance between outputs. This eases the matching of the push-pull amplifier's power transistors which have low impedance levels. The output ports have equal amplitude (-3 dB) with  $180^\circ$  phase differential. The 3A525 is available on tape and reel for pick and place high volume manufacturing.

#### Features:

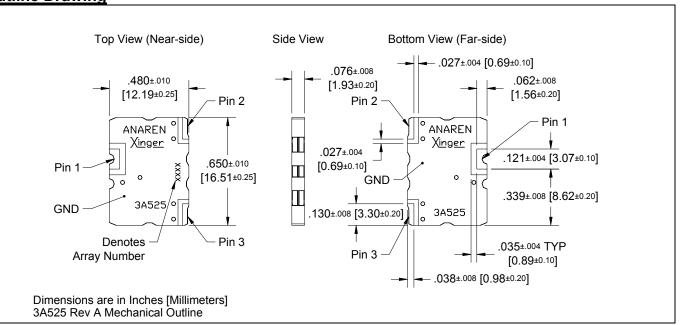
- 1.5 1.9 GHz
- 180° Transformer
- 50 Ohm to 2 x 25 Ohm
- Low Insertion Loss
- High Power
- Input to Output DC Isolation
- Surface Mountable
- Tape & Reel
- Convenient Package

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

Frequency	Unbalanced Port Impedance	Balanced Port Impedance*	Return Loss	Insertion Loss**
GHz	Ohms	Ohms	dB min	dB max
1.5 – 1.9	50	25	15	0.35
Amplitude Balance	Phase Balance	Power Handling	ΘJC	Operating Temp.
dB max	Degrees max	Watts	°C / Watt	°C
0.40	180± 5.0	150	7.2	-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: Toll Free: Europe: +

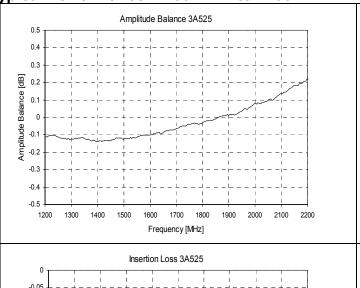
(315) 432-8909 (800) 544-2414 +44 2392-232392

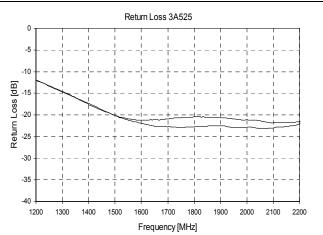
<sup>\*\*</sup>Insertion Loss excludes reflected power. \*  $25\Omega$  reference to ground

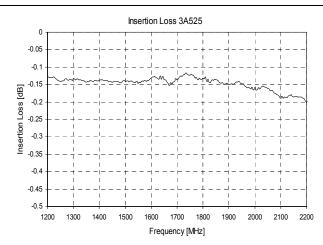


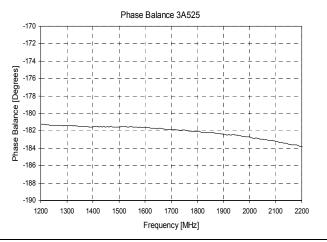
# Typical Performance: 1200 MHz. to 2200 MHz.





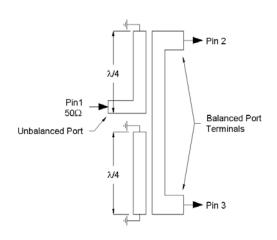


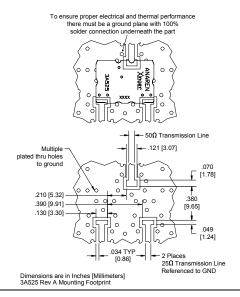




## **Pin Configuration**

**Mounting Configuration** 





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