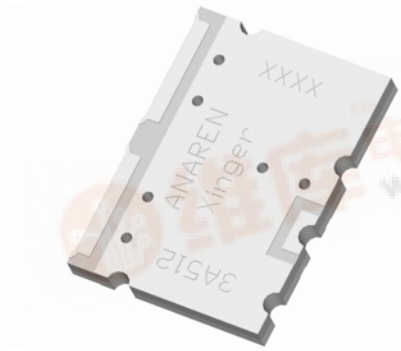
Anaren

Model 3A512

Rev. A

Xinger®

Balun
50Ω to 12.5Ω Balanced



Description

The 3A512 is a low profile balanced to unbalanced transformer designed for push-pull amplifiers in an easy to use surface mount package for Japanese PDC push-pull amplifier and mixer applications. These compact Xinger® surface mount baluns are ideal for high volume manufacturing and are more reliable and repeatable than traditional baluns. The 3A512 has an unbalanced port impedance of 50Ω and balanced port impedances of 12.5Ω to ground with a 25Ω 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 (-3dB) with 180 degree phase differential. The Xinger® balun is a result of years of research and development culminating with a solution so unique, a patent is pending on the design approach. The 3A512 is available on tape and reel for pick and place high volume manufacturing.

Features:

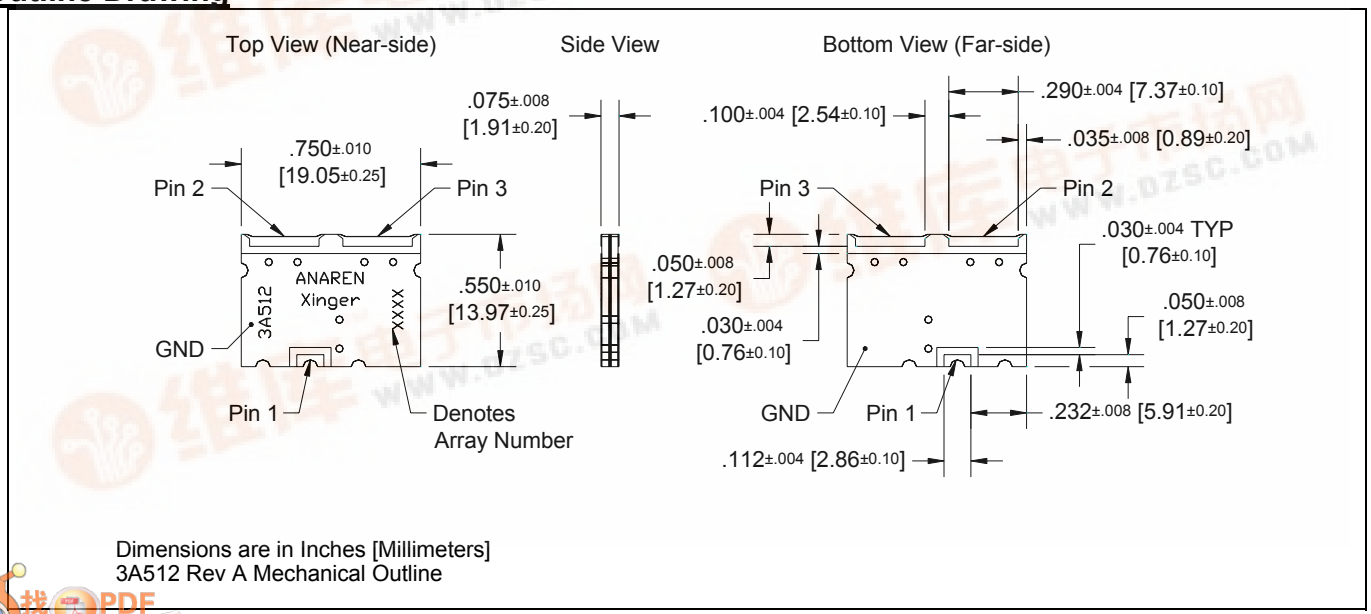
- 1.4 – 1.6 GHz
- 180° Transformer
- 50 Ohm to 2 x 12.5 + j3.5 Ohm
- Low Insertion Loss
- High Power
- Even Order Suppression
- Input to Output DC Isolation
- Surface Mountable
- Tape & Reel
- Convenient Package

ELECTRICAL SPECIFICATIONS***

Frequency	Unbalanced Port Impedance	Balanced Port Impedance*	Return Loss	Insertion Loss**
GHz	*Ohms*	*Ohms*	*dB Min*	*dB max*
1.4 – 1.6	50	12.5+j3.5	15	0.30
Amplitude Balance	**Phase Balance**	**Power Handling**	**ΘJC**	**Operating Temp.**
dB max	*Degrees max*	*Watts*	*°C / Watt*	*°C*
0.40	180± 5.0	250	5.8	-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.
**Insertion loss specification excludes reflection loss. * 50Ω reference to ground

Outline Drawing



Dimensions are in Inches [Millimeters]
3A512 Rev A Mechanical Outline

Anaren

Available on Tape and Reel For Pick and

USA/Canada: (315) 432-8909
Toll Free: (800) 544-2414

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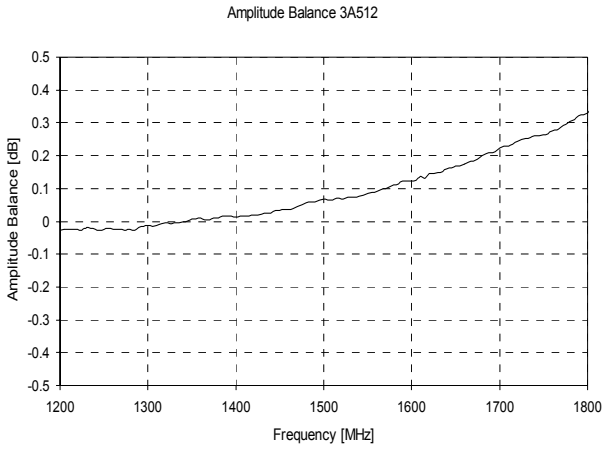
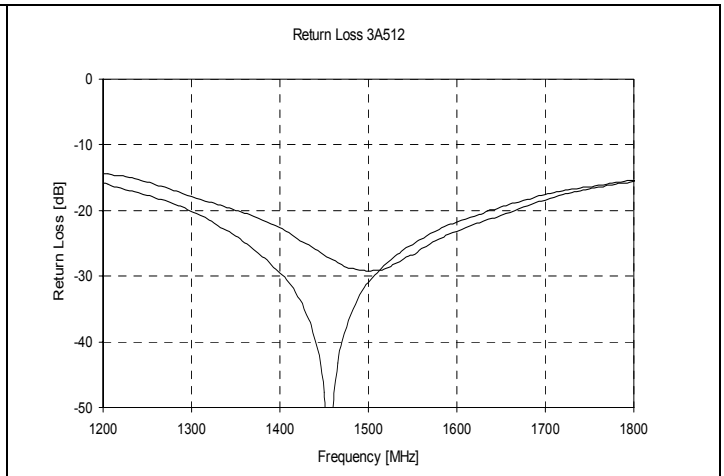
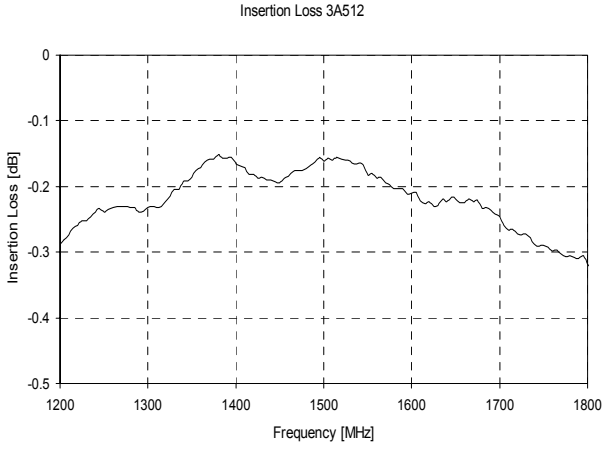
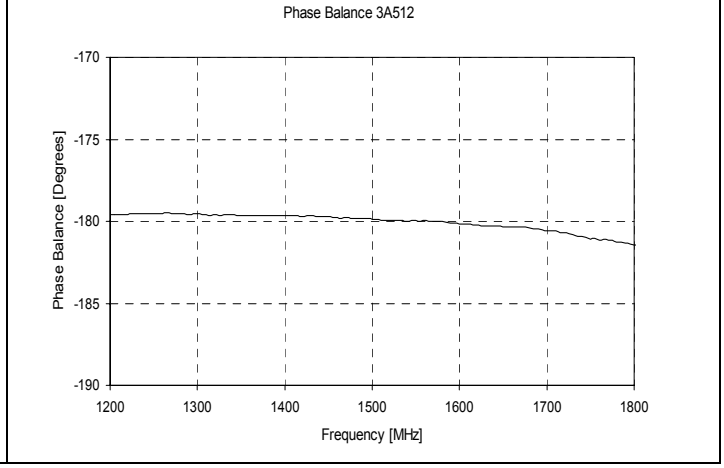
Typical Performance: 1200 MHz. to 1800 MHz.

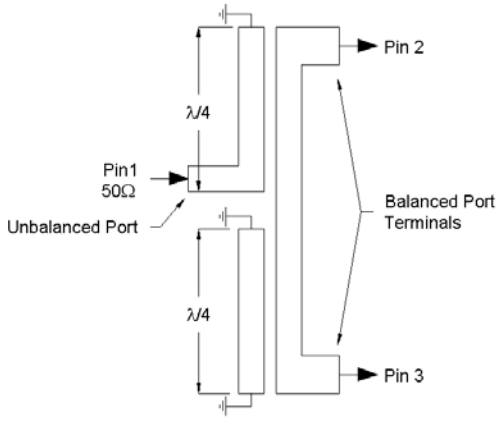




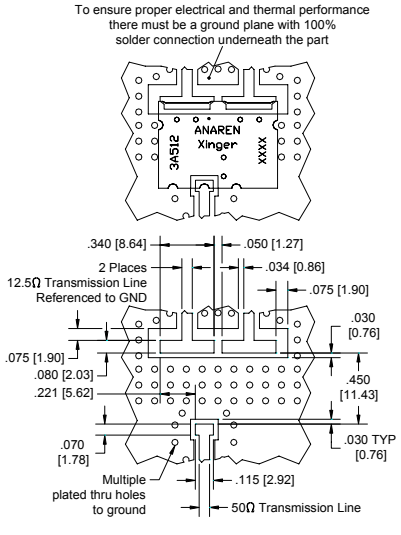




Pin Configuration:



Mounting Configuration:



Dimensions are in Inches [Millimeters]
3A512 Rev A Mounting Footprint

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