

Xinger Balun

50Ω to 25Ω Balanced





Features:

- 800 1000 MHz
- 180° Transformer
- 50 Ohm to 25 Ohm
- Broad Band
- Low Insertion Loss
- High Power
- Even Order Harmonic
 Suppression
- Input to Output DC Isolation
- Surface Mountable
- Tape & Reel
- Convenient Package

Outline Drawing

Description

The 3A425 is a low profile balanced to unbalanced transformer designed for pushpull amplifiers in an easy to use surface mount package covering GSM, D-AMPS and NMT900 applications. These compact Xinger® surface mount baluns are ideal for high volume manufacturing and are more reliable and repeatable than traditional baluns. The 3A425 has an unbalanced port impedance of 50Ω and balanced port impedances of 25Ω to ground with a 50Ω 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 3A425 is available on tape and reel for pick and place high volume manufacturing.

ELECTRICAL SPECIFICATIONS***

Frequency	Unbalanced Port Impedance	Balanced Port Impedance*	Return Loss	Insertion Loss**
MHz	Ohms	Ohms	dB min	dB max
800 - 1000	50	25	15	0.35
Amplitude Balance	Phase Balance	Power Handling	ΘJC	Operating Temp.
dB max	Degrees max	Watts	⁰C / Watt	°C
0.4	180+ 5.0	250	5.3	-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 excludes reflected power. * 25 Ω reference to ground







Available on Tape and Reel For Pick and Place Manufacturing. USA/Canada: (315) 432-8909 Toll Free: (800) 544-2414 Europe: +44 2392-232392



<u>inger</u> Typical Performance: 600 MHz. to 1200 MHz. Amplitude Balance 3A425 Return Loss 3A425 0 1 0.75 -5 0.5 -10 Amplitude Balance [dB] Return Loss [dB] 0.25 -15 -20 0 -0.25 -25 -0.5 -30 -0.75 -35 -40 -1 600 700 800 1000 1100 1200 1000 900 600 700 800 900 1100 1200 Frequency [MHz] Frequency [MHz] Insertion Loss 3A425 Phase Balance 3A425 0 -170 -0.05 -172 -0.1 -174 [Degrees] -0.15 -0.2 -0.25 -0.25 -0.35 -0.35 -176 -178 Balance -180 -182 Phase -0.35 -184 -0.4 -186 -0.45 -188 -0.5 -190 700 800 900 1000 1100 1200 600 700 800 900 1000 1100 1200 600 Frequency [MHz] Frequency [MHz]

Pin Configuration:



Mounting Configuration:



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Packaging Information

Parts are available in a reel. Packaging follows EIA 481-2 for reels. Parts are orientated in tape and reel as shown below. Minimum order quantity is 500 per reel.







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