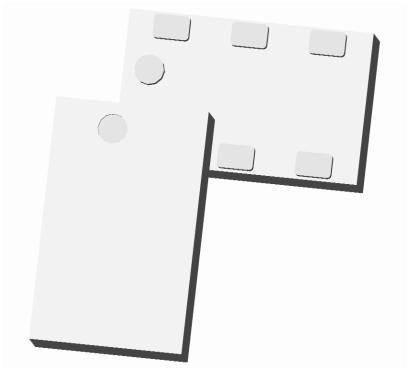
Model B0225J7575A00

Rev A

Ultra Low Profile 0805 Balun 75Ω to 75Ω Balanced



Description

The B0225J7575A00 is a low profile sub-miniature balanced to unbalanced transformer designed for differential inputs and output locations on next generation wireless chipsets in an easy to use surface mount package covering the DVB-T, DVB-C and DVB-S broadcast frequencies. The B0225J7575A00 is ideal for high volume manufacturing and is higher performance than traditional wire wound and lumped element baluns. The B0225J7575A00 has an unbalanced port impedance of 75Ω and a 75Ω balanced port impedance. This transformation enables single ended signals to be applied to differential ports. The output ports have equal amplitude (-3dB) with 180 degree phase differential. The B0225J7575A00 is available on tape and reel for pick and place high volume manufacturing.

Features:

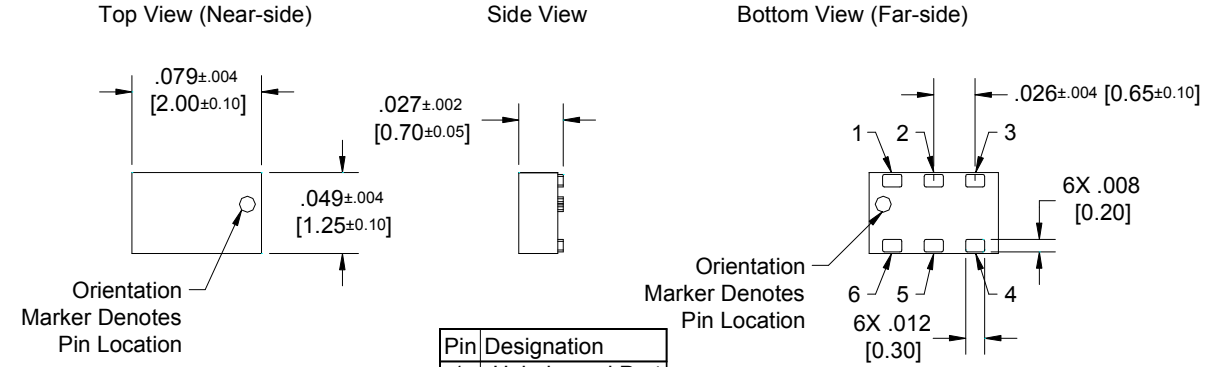
- **200 – 2500 MHz**
- **0.7mm Height Profile**
- **75 Ohm to 2 x 37.5 Ohm**
- **DVB-T, DVB-C & DVB-S**
- **Low Insertion Loss**
- **Input to Output DC Isolation**
- **Surface Mountable**
- **Tape & Reel**
- **Non-conductive Surface**
- **RoHS Compliant**

Detailed Electrical Specifications:

Specifications subject to change without notice.

	Broadband			Narrowband			25°C
Parameter	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Unit**
Frequency	200		2500	350		550	MHz
Unbalanced Port Impedance		75			75		Ω
Balanced Port Impedance		75			75		Ω
Return Loss	14	16		17	20		dB
Insertion Loss*		0.9	1.1		0.4	0.5	dB
Amplitude Balance		3.0	3.2		1.4	1.6	dB
Phase Balance		38	40		24	26	Degrees
CMRR		8			13		dB
Power Handling			0.5			0.5	Watts
Operating Temperature	-55		+85	-55		+85	ºC

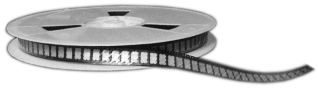
* Insertion Loss stated at room temperature (Insertion Loss is approximately 0.1 dB higher at +85 ºC) Outline Drawing



Pin	Designation
1	Unbalanced Port
2	GND
3	Balanced Port
4	Balanced Port
5	Do not connect
6	NC

Dimensions are in Inches [Millimeters]
Mechanical Outline

Tolerances are Non-Cumulative



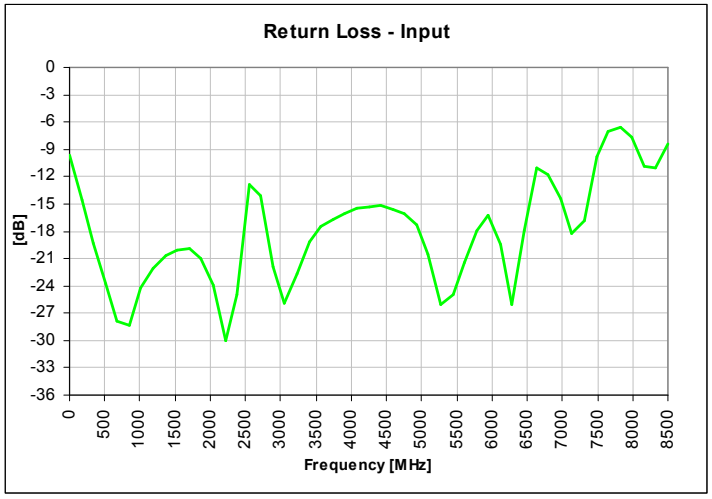
Available on Tape and Reel for Pick and Place Manufacturing.

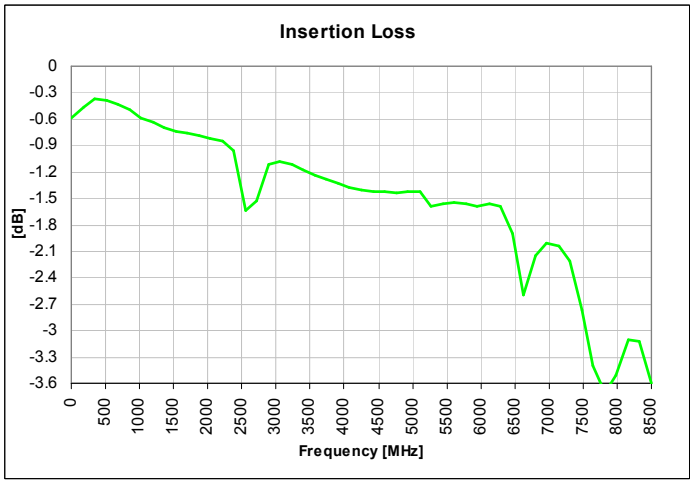
USA/Canada: (315) 432-8909
Toll Free: (800) 411-6596
Europe: +44 2392-232392

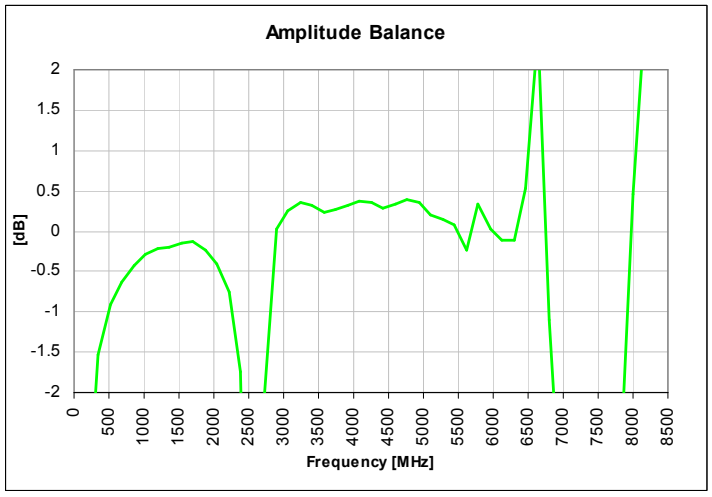
Model B0225J7575A00

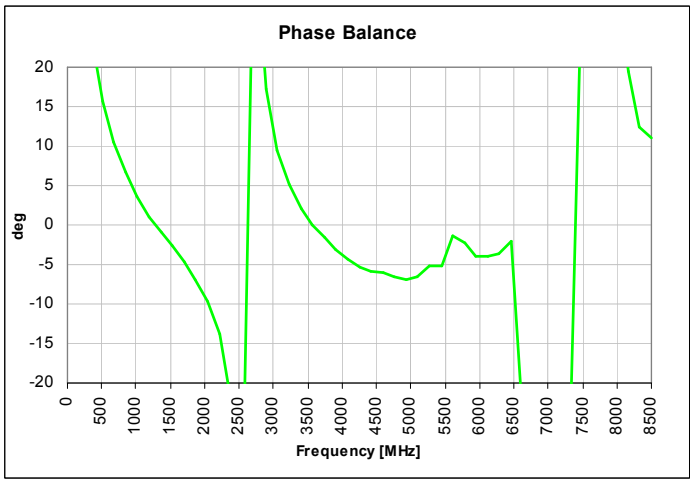
Rev A

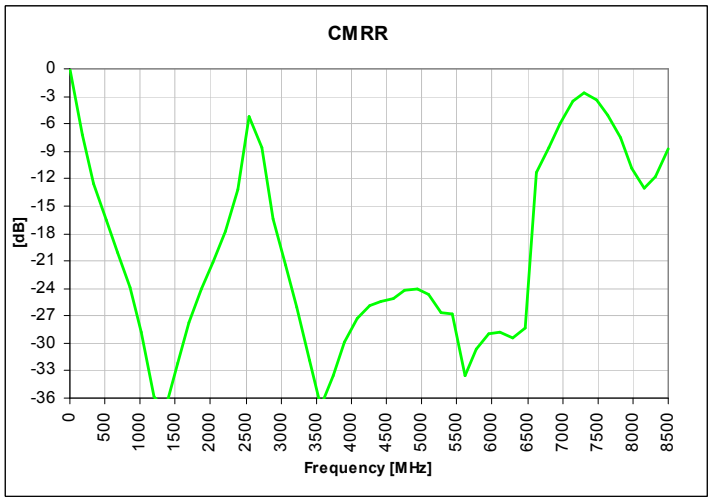
Typical Broadband Performance: 0 GHz. to 8.5 GHz.





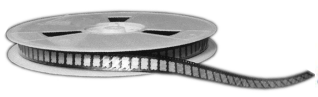






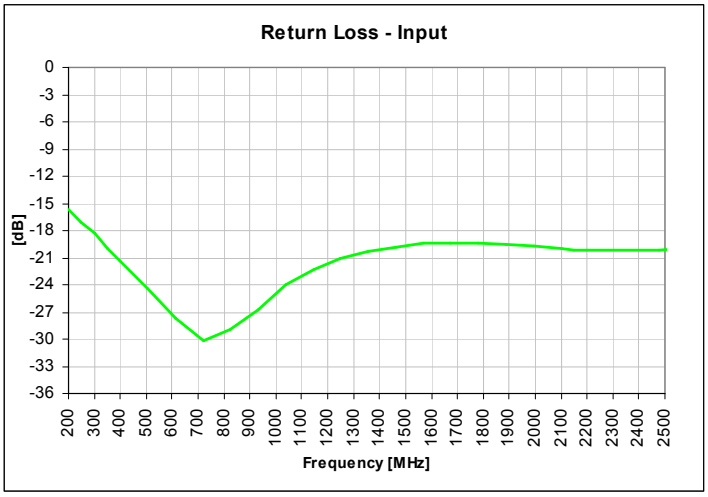
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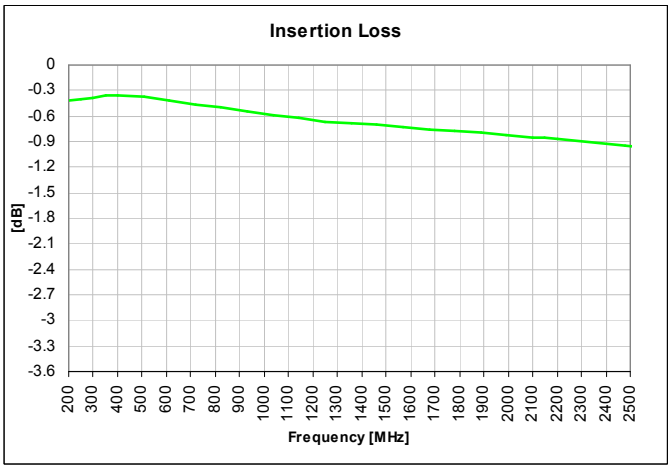
Available on Tape and Reel for Pick and Place Manufacturing.

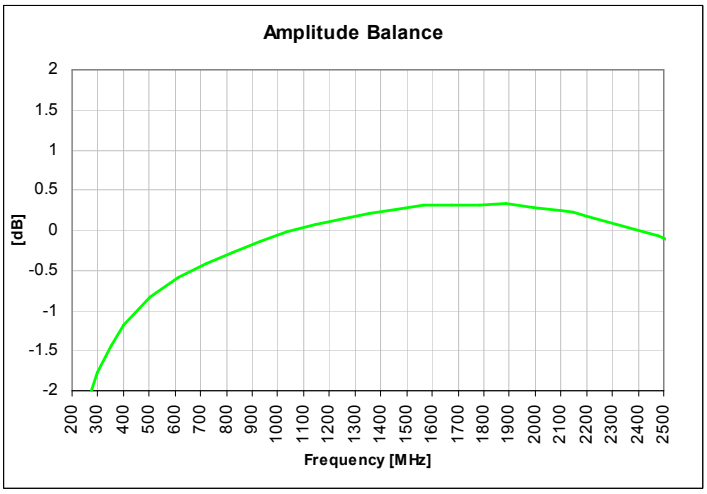


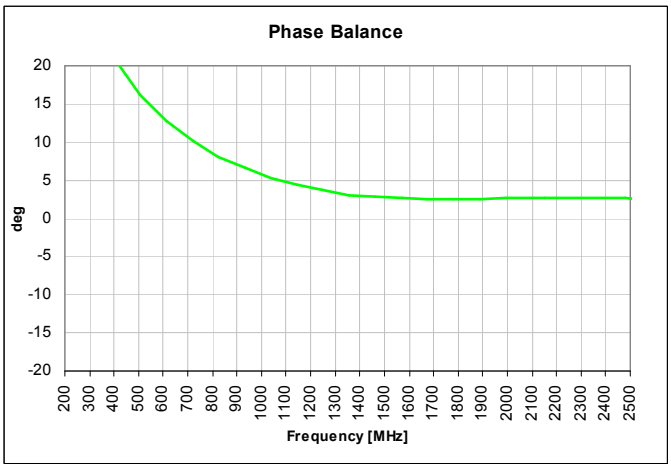
Anaren
What'll we think of next?™

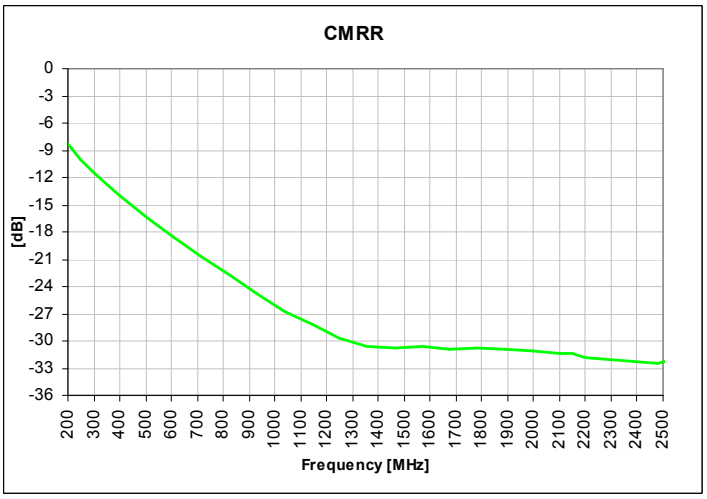
Typical Performance: 200 MHz. to 2500 MHz.

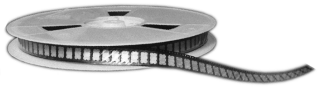












Available on Tape and Reel for Pick and Place Manufacturing.

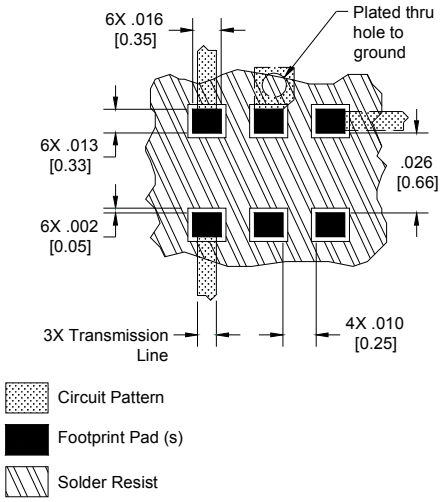
USA/Canada: (315) 432-8909
Toll Free: (800) 411-6596
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Mounting Configuration:

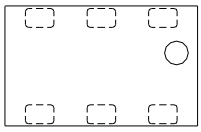
In order for Xinger surface mount components to work optimally, the proper impedance transmission lines must be used to connect to the RF ports. If this condition is not satisfied, insertion loss, Isolation and VSWR may not meet published specifications.

All of the Xinger components are constructed from ceramic filled PTFE composites which possess excellent electrical and mechanical stability having X and Y thermal coefficient of expansion (CTE) of 17 ppm/^{o}C.

An example of the PCB footprint used in the testing of these parts is shown below. In specific designs, the transmission line widths need to be adjusted to the unique dielectric coefficients and thicknesses as well as varying pick and place equipment tolerances.



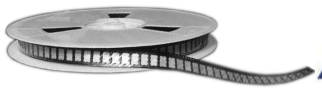
Part Orientation (Top View)



Dimensions are in Inches [Millimeters]
0805 Mounting Footprint

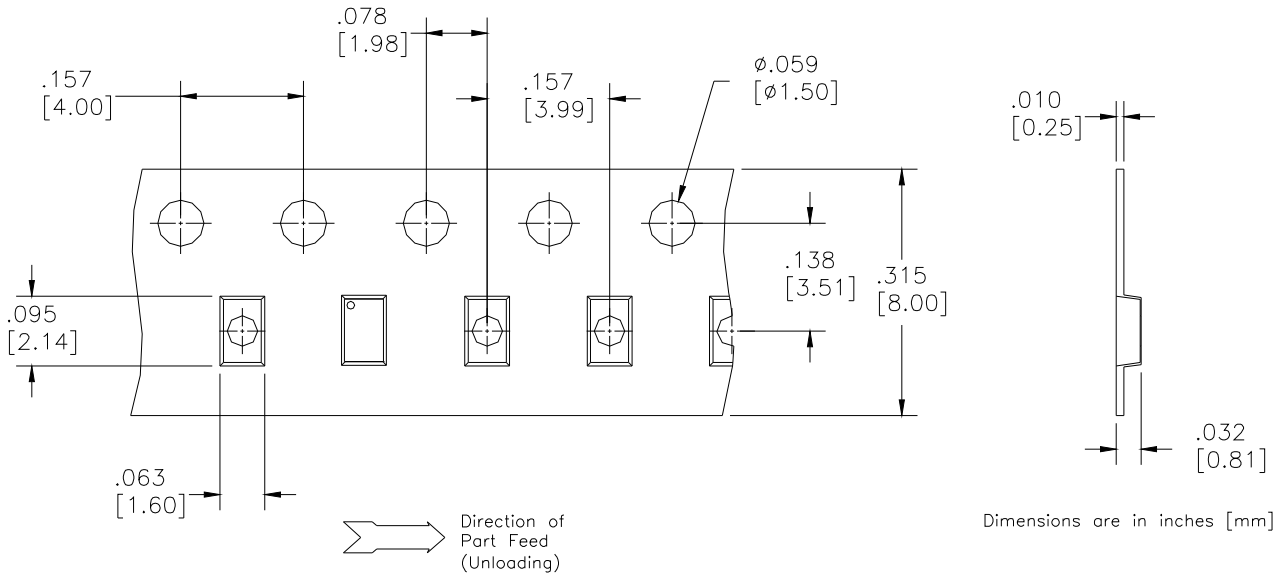
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Toll Free: (800) 411-6596
Europe: +44 2392-232392

Available on Tape and Reel for Pick and Place Manufacturing.



Packaging and Ordering Information

Parts are available in reel and are packaged per EIA 481-2. Parts are oriented in tape and reel as shown below. Minimum order quantities are 4000 per reel. See Model Numbers below for further ordering information.



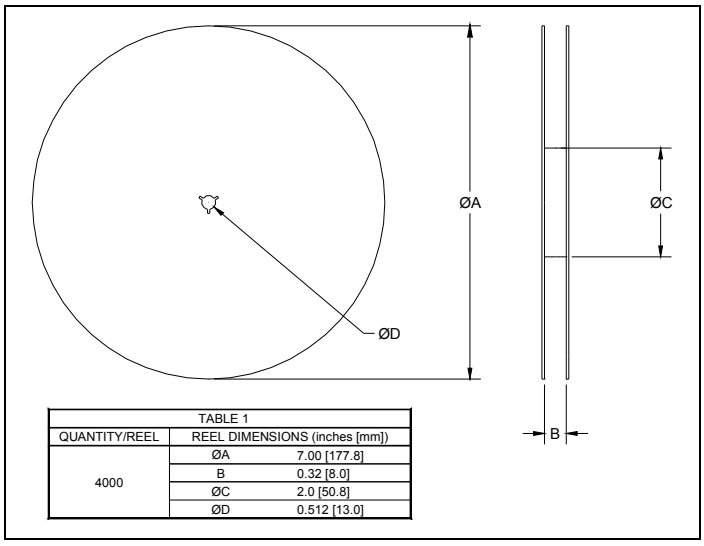
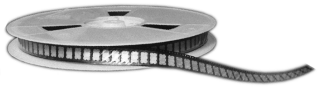


TABLE 1		
QUANTITY/REEL	REEL DIMENSIONS (inches [mm])	
4000	ØA	7.00 [177.8]
	B	0.32 [8.0]
	ØC	2.0 [50.8]
	ØD	0.512 [13.0]



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