

Description

The (patent pending) X0066L7575A00 is an ultra-small low profile crossover that enables the transition of two intersecting RF traces in an easy to use industry standard SMT package. The 0603 crossover is ideal for any critical applications where layout and available space are a premium and resorting to addition PWB layers and larger overall footprints are unacceptable. With low insertion loss and high isolation packaged with cost in mind, this novel component delivers.

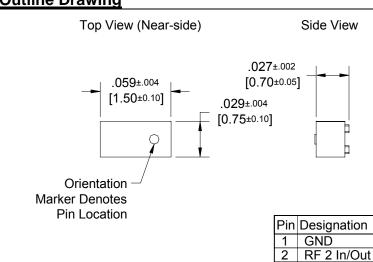
Detailed Electrical Specifications*: Specifications subject to change without notice.

Features:

- 0 2500 MHz.
- 0.7mm Height Profile
- 75 Ohm RF-RF Crossover
- **All Wireless Frequencies**
- **Low Insertion Loss**
- **High Isolation**
- **Surface Mountable**
- Tape & Reel
- **Non-conductive Surface**
- **RoHS Compliant**

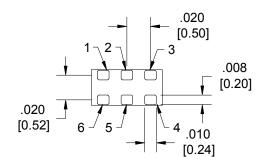
	R	ROOM (25°C)			
Parameter	Min.	Тур.	Max	Unit	
Frequency	0		2500	MHz	
Port Impedance		75		Ω	
Return Loss	19	21		dB	
Insertion Loss		0.1	0.15	dB	
Isolation (cross-talk)					
0 – 700 MHz	44	52		dB	
700 - 1700 MHz	40	47		dB	
1700 - 2500 MHz	38	43		dB	
Power Handling			2	Watts	
Operating Temperature	-55		+85	°C	

Outline Drawing



RF 2 In/Out **GND** RF 1 In/Out RF 2 In/Out Dimensions are in Inches [Millimeters] RF 1 In/Out

Bottom View (Far-side)



Tolerances are Non-Cumulative



Mechanical Outline

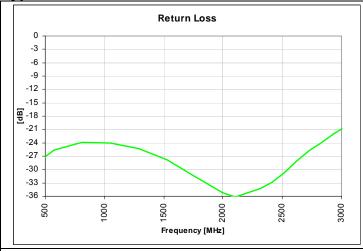


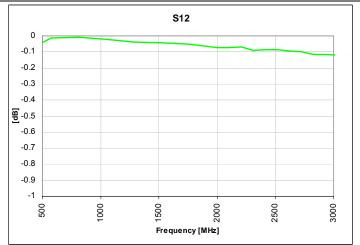
Available on Tape and Reel for Pick and Place Manufacturing.

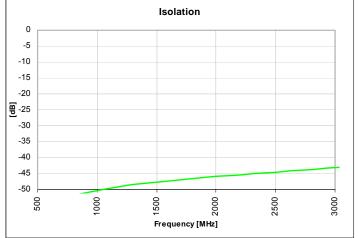
USA/Canada: (315) 432-8909 Toll Free: (800) 411-6596 +44 2392-232392 Europe:

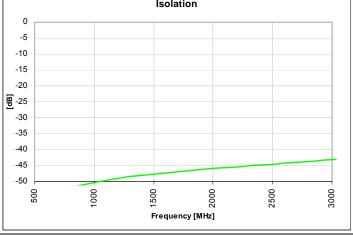


Typical Broadband Performance: 0 GHz. to 3.0 GHz.











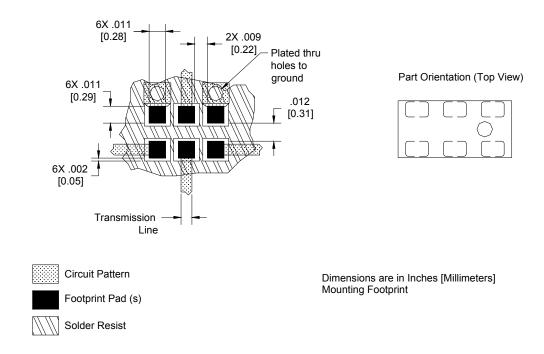


Mounting Configuration:

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/°C.

An example of the PCB footprint used in the testing of these parts is shown on 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.

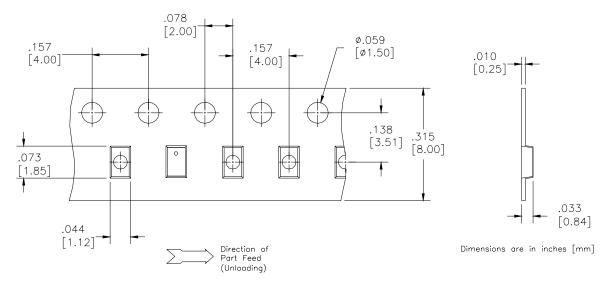


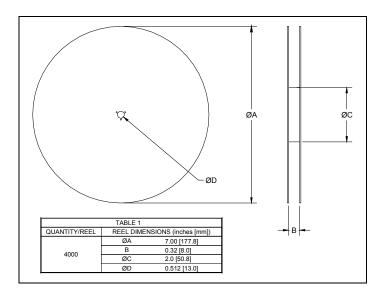




Packaging and Ordering Information

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.









BD 2425 J 50 100 A 00

Function	Frequency	Package	Unbalanced	Balanced Impedance	ed Impedance Plating	
		Dimensions	Impedance	+ Coupling	Finish	Codes
B = Balun	0110 = 100 - 1000 MHz	A = 150 x 150 mils	50 = 50 Ohm	25 = 25 Ω Balanced	A = Gold	
BD = Balun + DC	0810 = 800 - 1000 MHz	(4mm × 4mm)	75 = 75 Ohm	30 = 30 Ω Balanced	P = Tin-Lead	
F = Filter	0922 = 950 - 2150 MHz	C = 120 x 120 mils		50 = 50 Ω Balanced		
FB = Filter / Balun	0826 = 800 - 6200 MHz	(3mm x 3mm)		75 = 75 Ω Balanced		
C = 3dB Coupler	1222 = 1200 - 2200 MHz	E = 100 x 80 mils		100 = 100 Ω Balanced		
DC = Directional	1416 = 1400 - 1600 MHz	(2.5mm x 2mm)		150 = 150 Ω Balanced		
J = RF Jumper	1722 = 1700 - 2200 MHz	$J = 80 \times 50 \text{ mils}$		200 = 200 Ω Balanced		
X = RF cross over	2326 = 2300 - 2600 MHz	(2mm x 1.25mm)		300 = 300 Ω Balanced		
	2425 = 2400 - 2500 MHz	L = 60 x 30 mils		400 = 400 Ω Balanced		
	3150 = 3100 - 5000 MHz	(1.5mm x 0.75mm)		03 = 3dB Hybrid		
	3436 = 3400 - 3600 MHz	N = 40 x 40 mils		10 = 10dB Directional		
	4859 = 4800 - 5900 MHz	(1mm x 1mm)		20 = 20dB Directional		
	5153 = 5100 - 5300 MHz					
	5159 = 5100 - 5900 MHz					
	5759 = 5700 - 5900 MHz					

