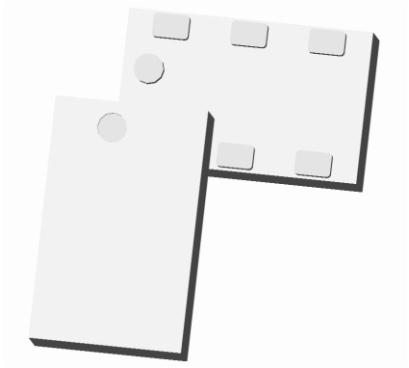
Ultra Low Profile 0805 Balun
50Ω to 100Ω Balanced



Description

The BD0810J50100AHF 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 GSM frequency. The BD0810J50100AHF is ideal for high volume manufacturing and is higher performance than traditional ceramic and lumped element baluns. The BD0810J50100AHF has an unbalanced port impedance of 50Ω and a 100Ω balanced port impedance. This transformation enables single ended signals to be applied to differential ports on modern semiconductors. The output ports have equal amplitude (-3dB) with 180 degree phase differential. The BD0810J50100AHF is available on tape and reel for pick and place high volume manufacturing.

Features:

- **700 – 1600 MHz**
- **0.8mm Height Profile**
- **50 Ohm to 2 x 50 Ohm**
- **GSM**
- **Low Insertion Loss**
- **Input to Output DC Isolation**
- **Surface Mountable**
- **Tape & Reel**
- **Non-conductive Surface**
- **RoHS Compliant**
- **Halogen Free**

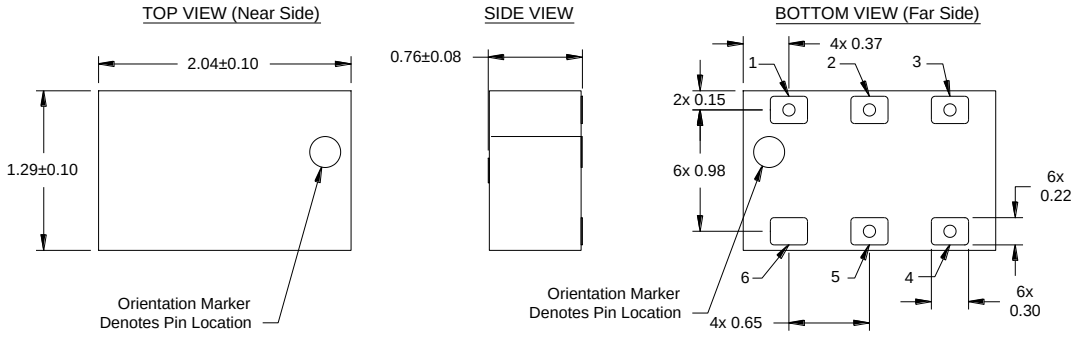
Detailed Electrical Specifications:

Specifications subject to change without notice.

	ROOM (25°C)						
Parameter	**Min.**	**Typ.**	**Max**	**Min.**	**Typ.**	**Max**	**Unit**
Frequency	800		1000	700		1600	MHz
Unbalanced Port Impedance		50			50		Ω
Balanced Port Impedance		100			100		Ω
Return Loss	13	15		11	14		dB
Insertion Loss*		0.70	0.95		0.9	1.2	dB
Amplitude Balance		0.2	0.4		0.3	0.6	dB
Phase Balance		1	2		1	3	Degrees
CMRR		39			35		dB
Power Handling @85C			2			2	Watts
Power Handling @105C			1.2			1.2	Watts
DC Current Rating			300			300	mA
Operating Temperature	-55		+105	-55		+105	*ºC*

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

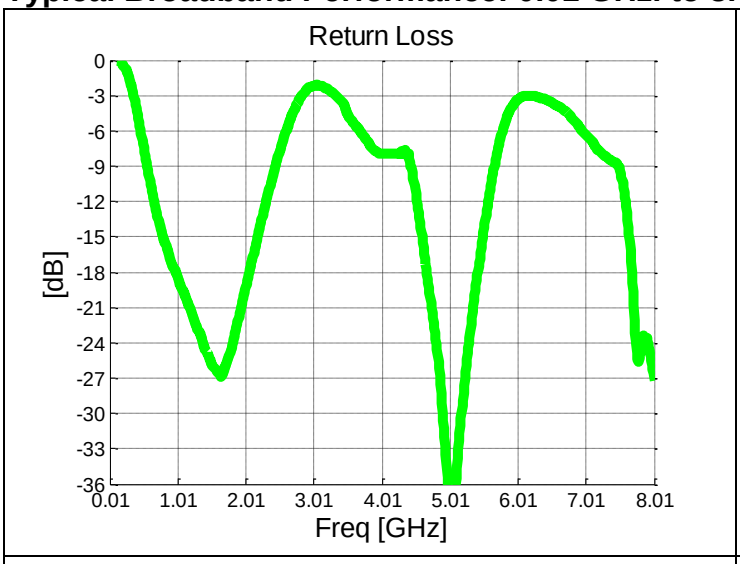
Outline Drawing

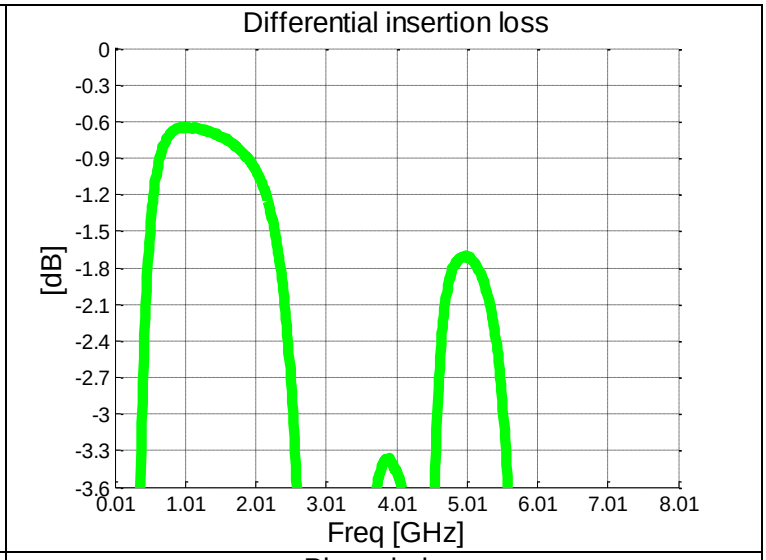


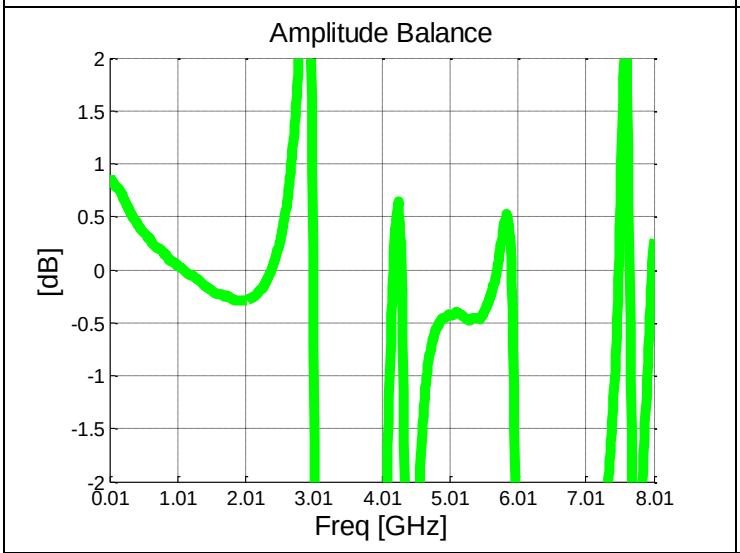
Pin	Designation
1	In
2	GND/DC Feed +RF GND
3	Out 1
4	Out 2
5	GND
6	NC

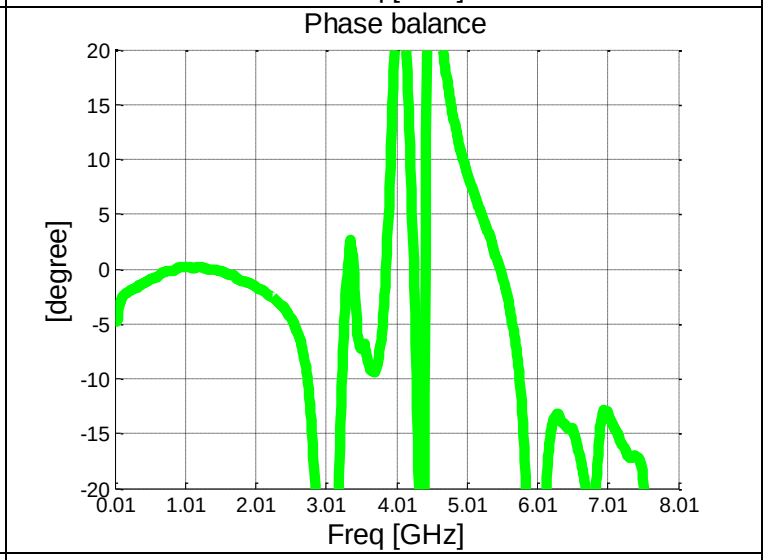
Mechanical Outline
-Dimensions are in Millimeters
-Tolerences are Non-Cumulative

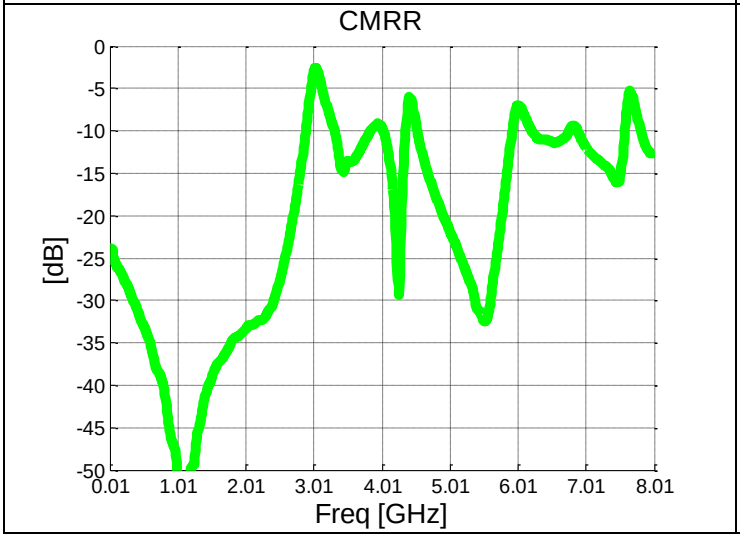
Typical Broadband Performance: 0.01 GHz. to 8.01 GHz.



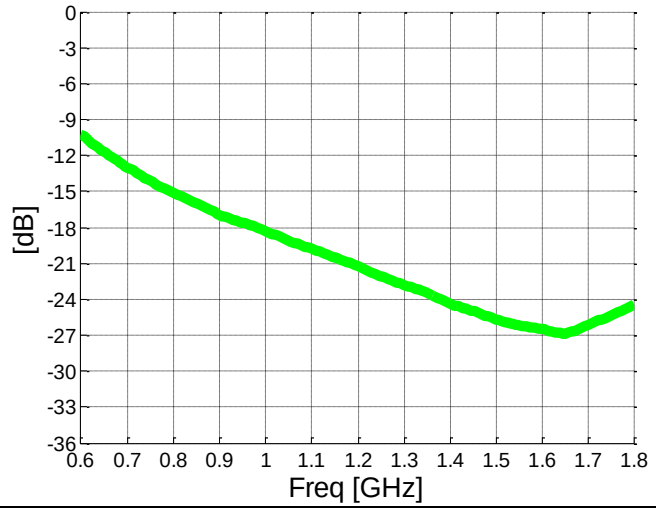


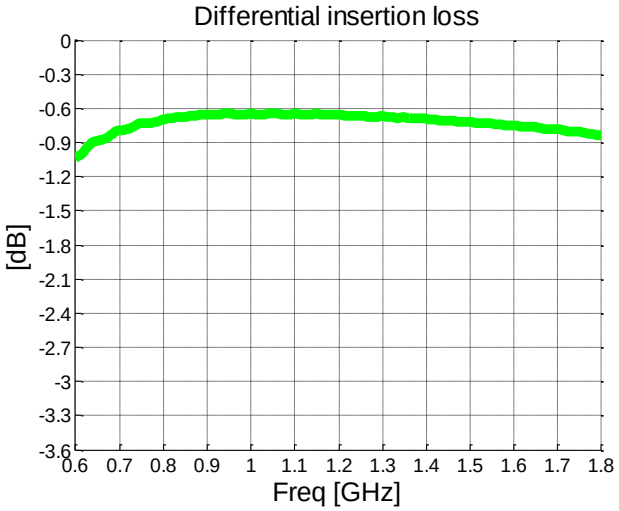


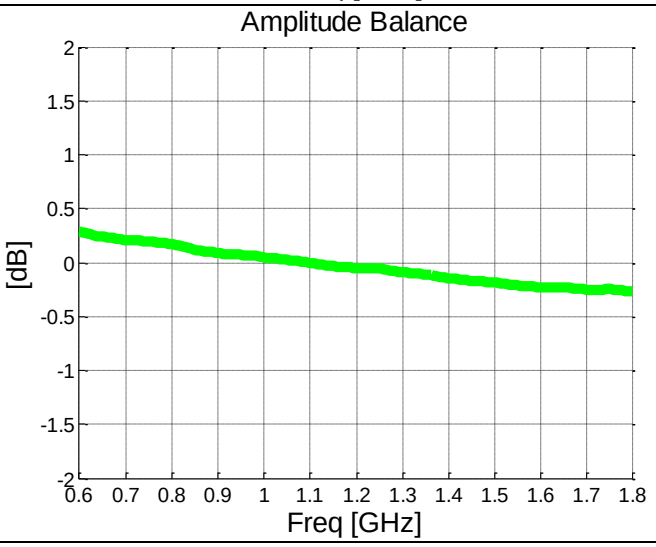


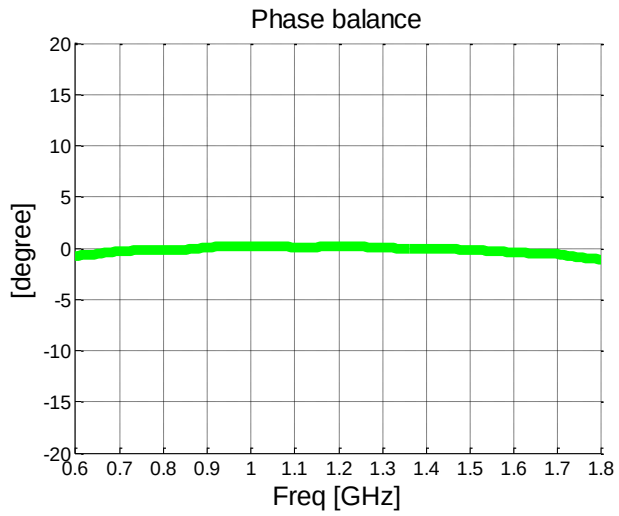


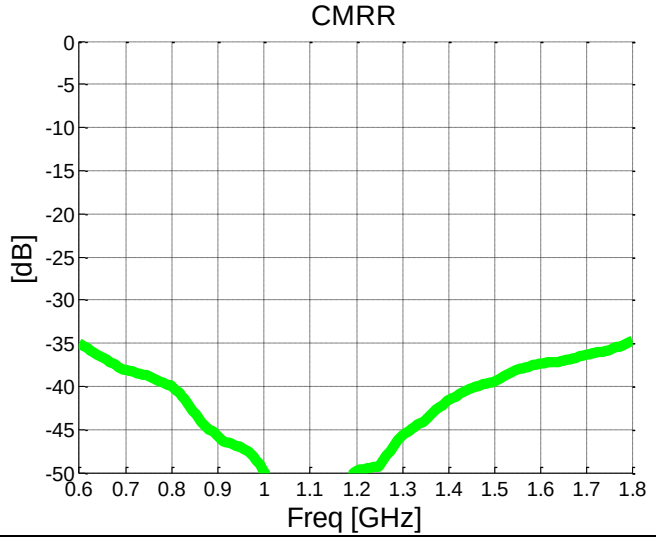
Typical Performance: 600 MHz to 1800 MHz











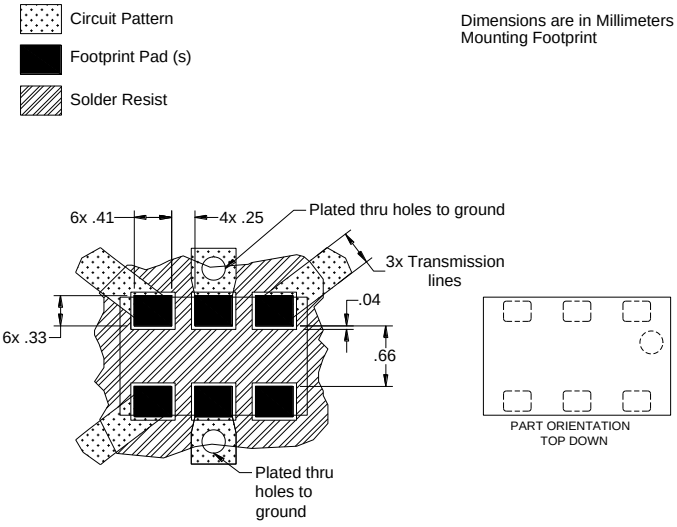
Mounting Configuration:

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.

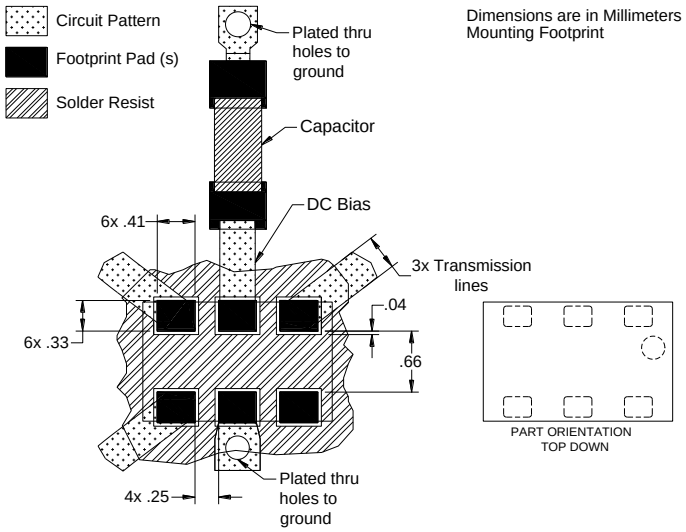
All of the Xinger components are constructed from organic PTFE based composites which possess excellent electrical and mechanical stability. Xinger components are compliant to a variety of ROHS and Green standards and ready for Pb-free soldering processes. Pads are Gold plated with a Nickel barrier.

An example of the PCB footprint used in the testing of these parts is shown below. An example of a DC-biased footprint is also 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.

No Bias Footprint

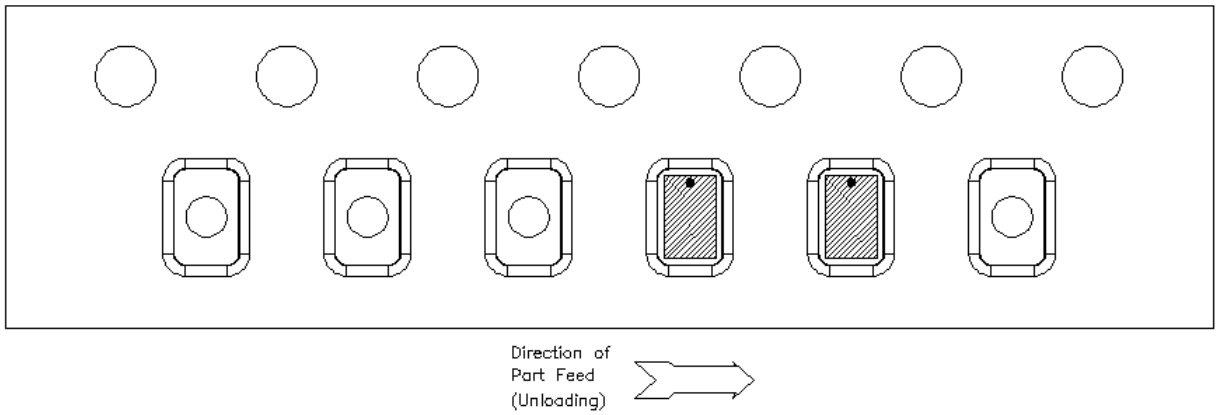


DC Bias Footprint



Packaging and Ordering Information

Parts are available in reel and are packaged per EIA 481-D. Parts are oriented in tape and reel as shown below. Minimum order quantities are 4000 per reel.



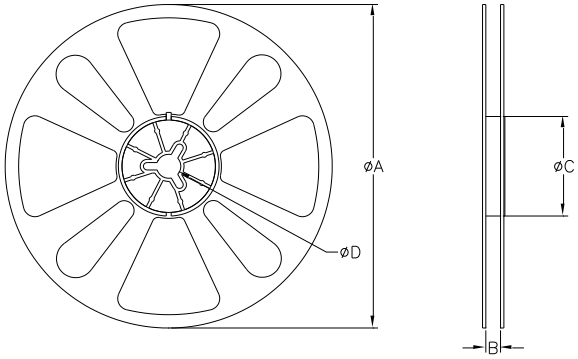


TABLE 1		
QUANTITY/REEL	REEL DIMENSIONS mm	
4000	øA	177.80
	B	8.00
	øC	50.80
	øD	13.00

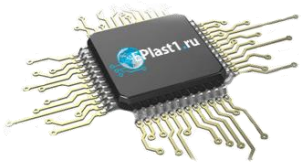
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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