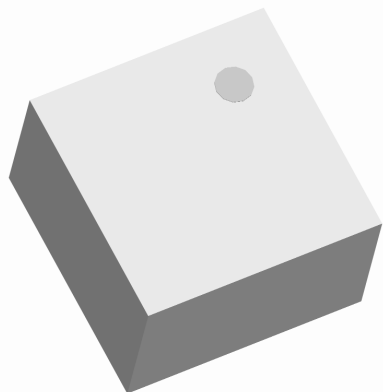


# Xinger®



## Ultra Low Profile 0404 Balun 50Ω to 150Ω Balanced

### Description

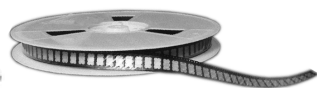
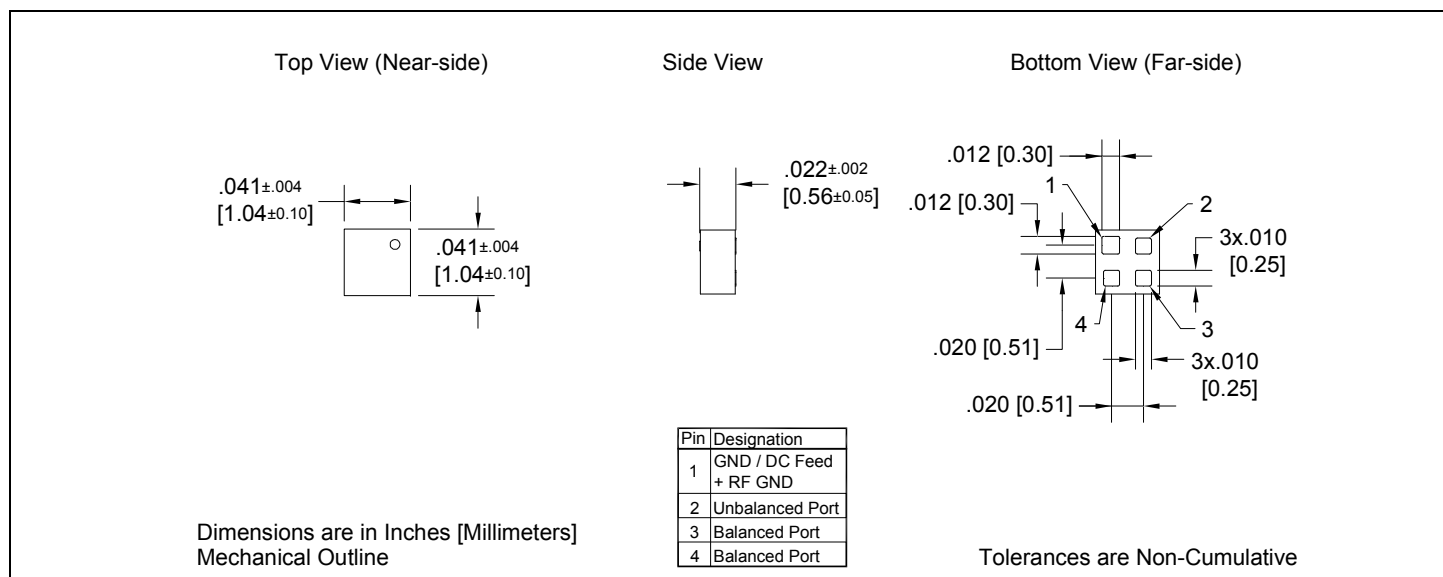
The BD4859N50150AHF is a low cost, low profile sub-miniature unbalanced to balanced transformer designed for differential inputs and output locations on modern chipsets in an easy to use surface mount package covering 802.11a Uni-Band II & III and the Japanese ISM band (4.9 GHz). The BD4859N50150AHF is ideal for high volume manufacturing and delivers higher performance than traditional ceramic baluns. The BD4859N50150AHF has an unbalanced port impedance of 50Ω and a 150Ω balanced port impedance. This transformation enables single ended signals to be applied to differential ports on modern integrated chipsets. The output ports have equal amplitude (-3dB) with 180 degree phase differential. The BD4859N50150AHF is available on tape and reel for pick and place high volume manufacturing.

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

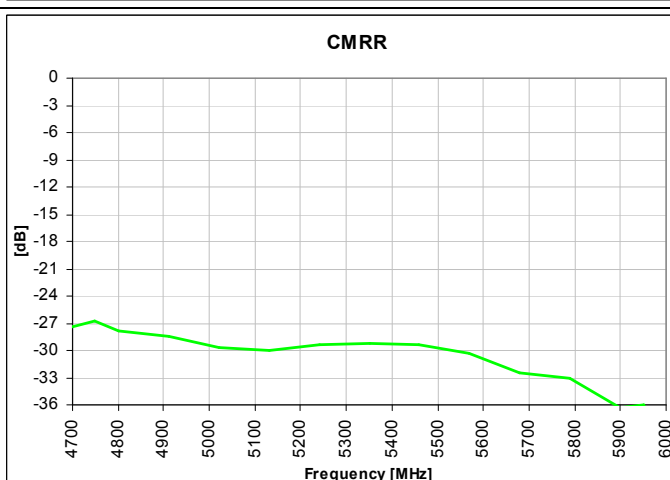
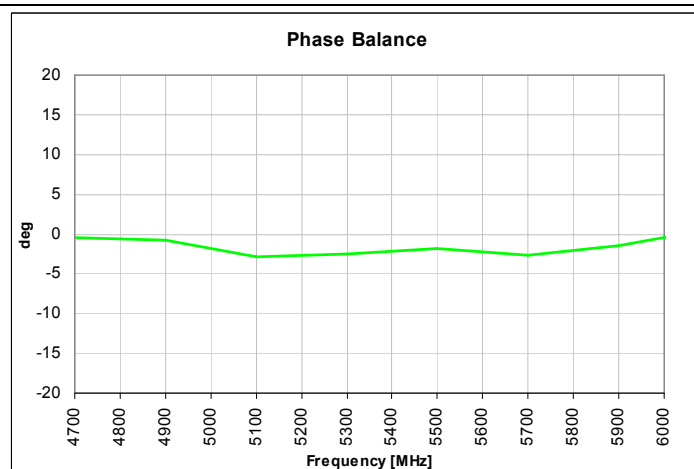
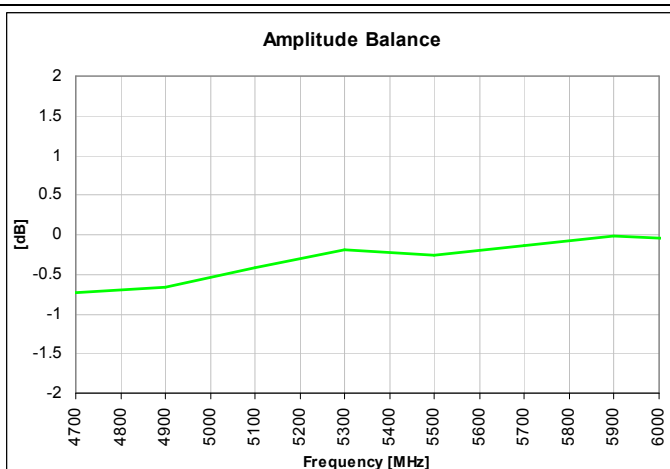
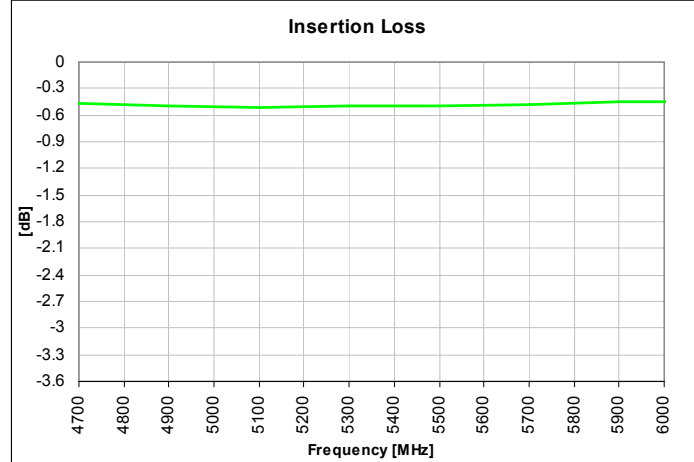
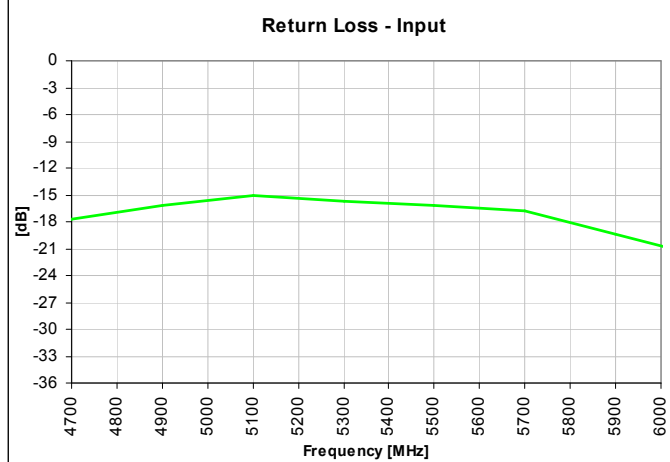
| Features:                   | Parameter                 | ROOM (25°C) |      |      | Unit    |
|-----------------------------|---------------------------|-------------|------|------|---------|
|                             |                           | Min.        | Typ. | Max  |         |
| • 4800 – 5900 MHz           | Frequency                 | 4800        |      | 5900 | MHz     |
| • 0.56 mm Height Profile    | Unbalanced Port Impedance |             | 50   |      | Ω       |
| • 50 Ohm to 2 x 75 Ohm      | Balanced Port Impedance   |             | 150  |      | Ω       |
| • Low Insertion Loss        | Return Loss               | 12          | 17   |      | dB      |
| • 802.11a Uni-Band II & III | Insertion Loss*           |             | 0.4  | 0.6  | dB      |
| • Home Cordless Compliant   | Amplitude Balance         |             | 0.8  | 1.4  | dB      |
| • Surface Mountable         | Phase Balance             |             | 4    | 10   | Degrees |
| • Tape & Reel               | CMRR                      |             | 26   |      | dB      |
| • Non-conductive Surface    | Power Handling            |             |      | 1.0  | Watts   |
| • RoHS Compliant            | Operating Temperature     | -55         |      | +85  | °C      |
| • Halogen Free              |                           |             |      |      |         |

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

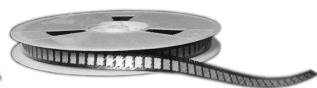
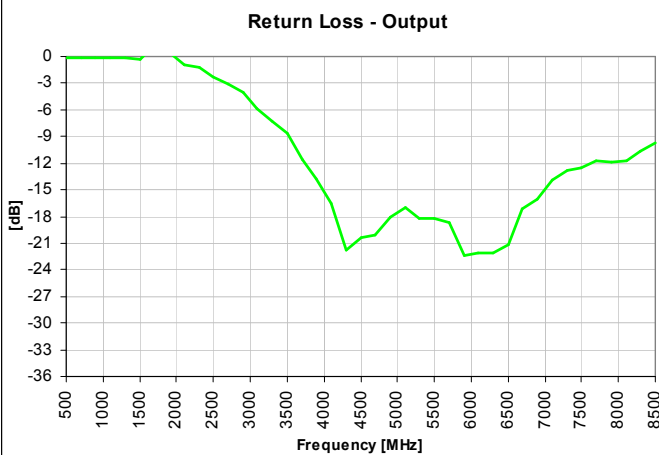
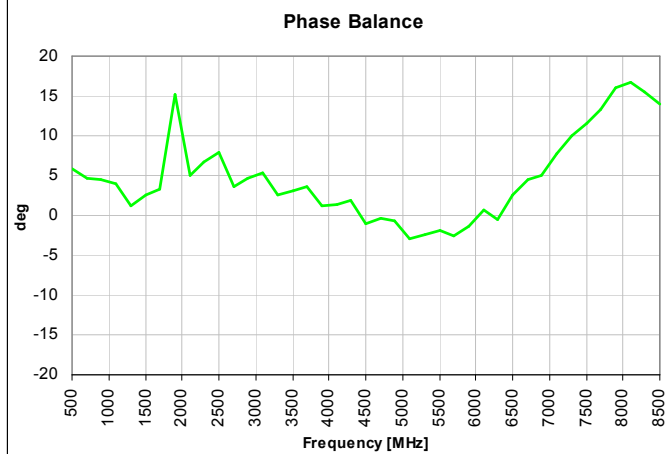
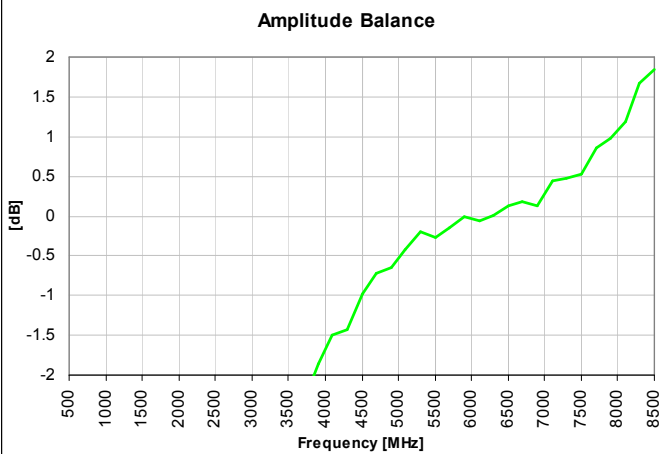
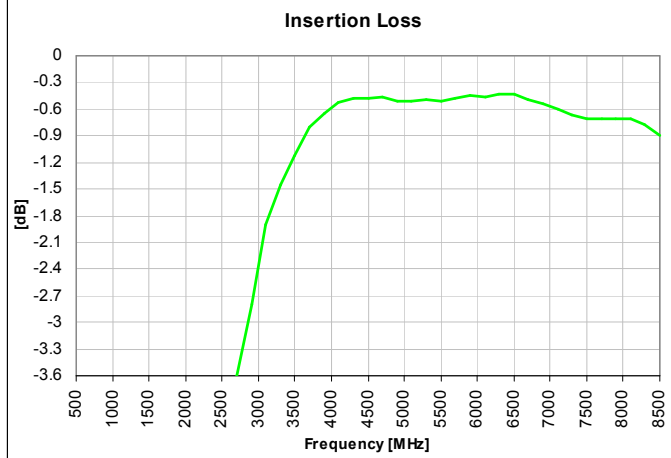
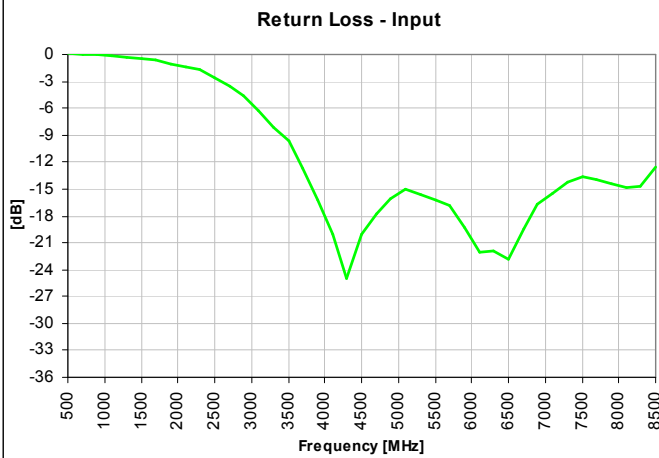
### Outline Drawing



## Typical Performance: 4700 MHz. to 6000 MHz.



### Wide Band Performance: 500 MHz. to 8500 MHz.

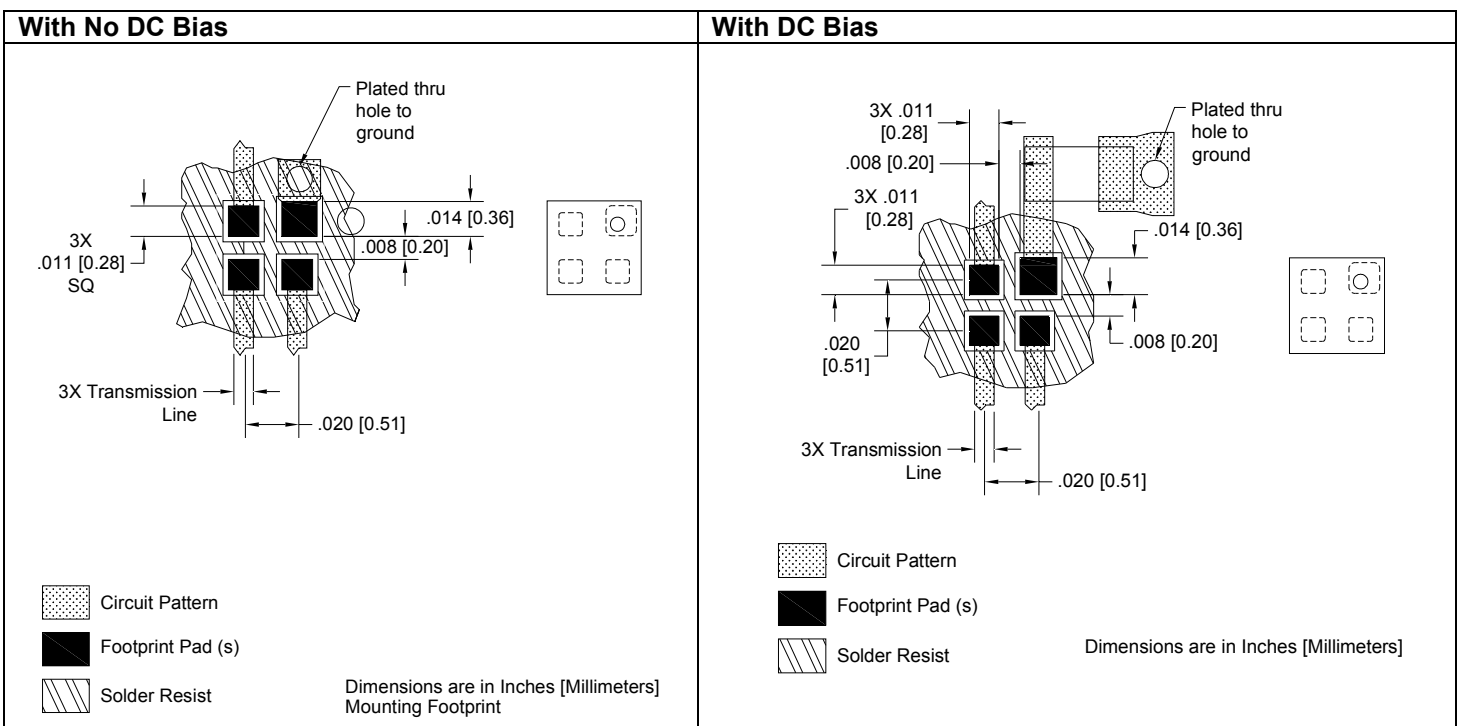


## Mounting Configuration:

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.

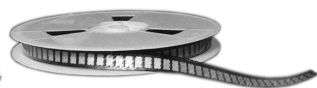
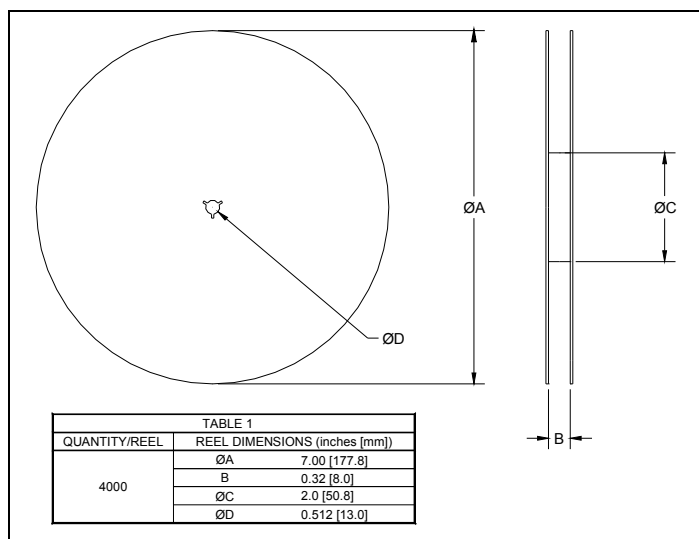
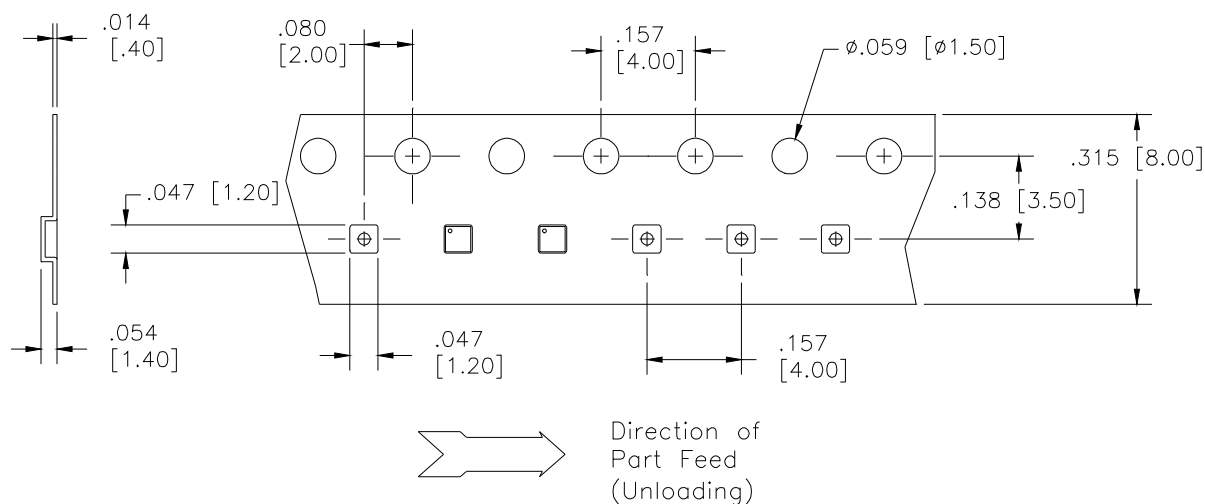
All of the Xinger components are constructed from ceramic filled PTFE composites which possess excellent electrical and mechanical stability having X and Y thermal coefficient of expansion (CTE) of 17 ppm/°C.

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



### 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.



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9