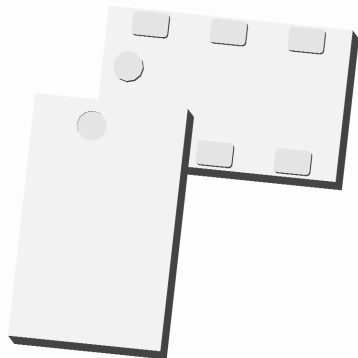


# Xinger®

## Ultra Low Profile 0805 Balun 50Ω to 200Ω Balanced



### Description

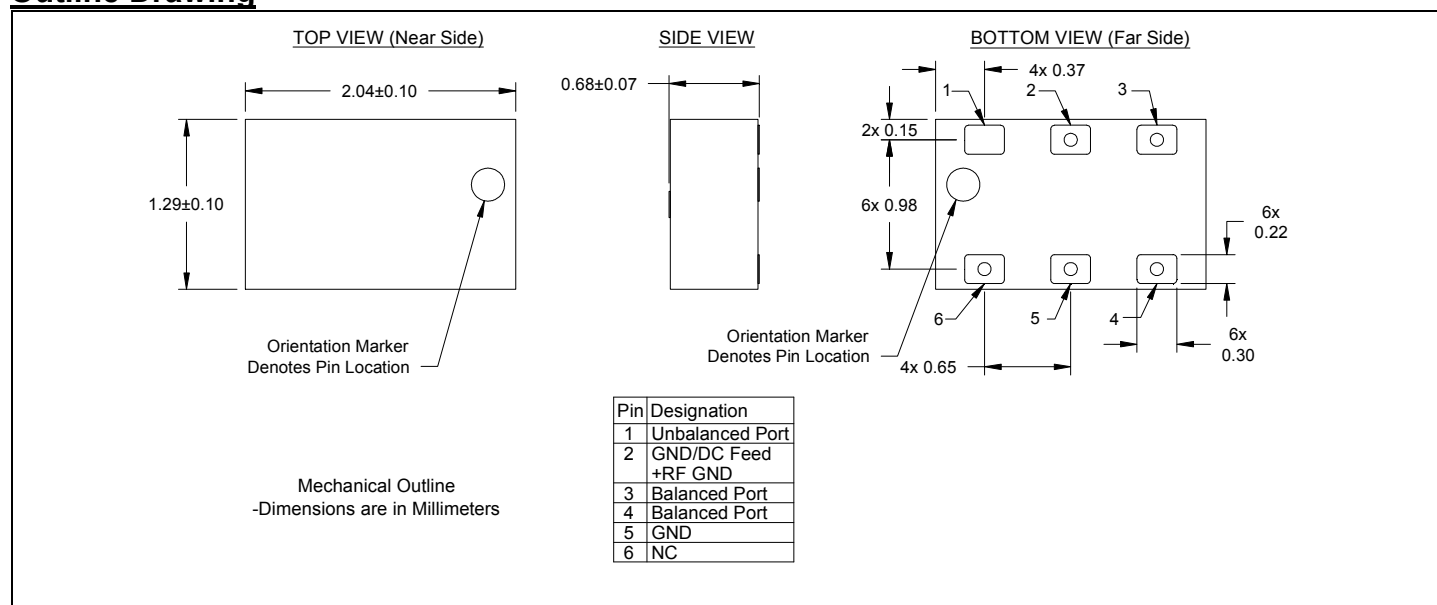
The BD1722J50200AHF is a low profile sub-miniature balanced to unbalanced transformer designed for differential inputs and output locations on next generation wireless chipsets in an easy to use surface mount package covering the DCS, PCS, UMTS and CDMA frequencies. The BD1722J50200AHF is ideal for high volume manufacturing and is higher performance than traditional ceramic and lumped element baluns. The BD1722J50200AHF has an unbalanced port impedance of 50Ω and a 200Ω 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 BD1722J50200AHF is available on tape and reel for pick and place high volume manufacturing.

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

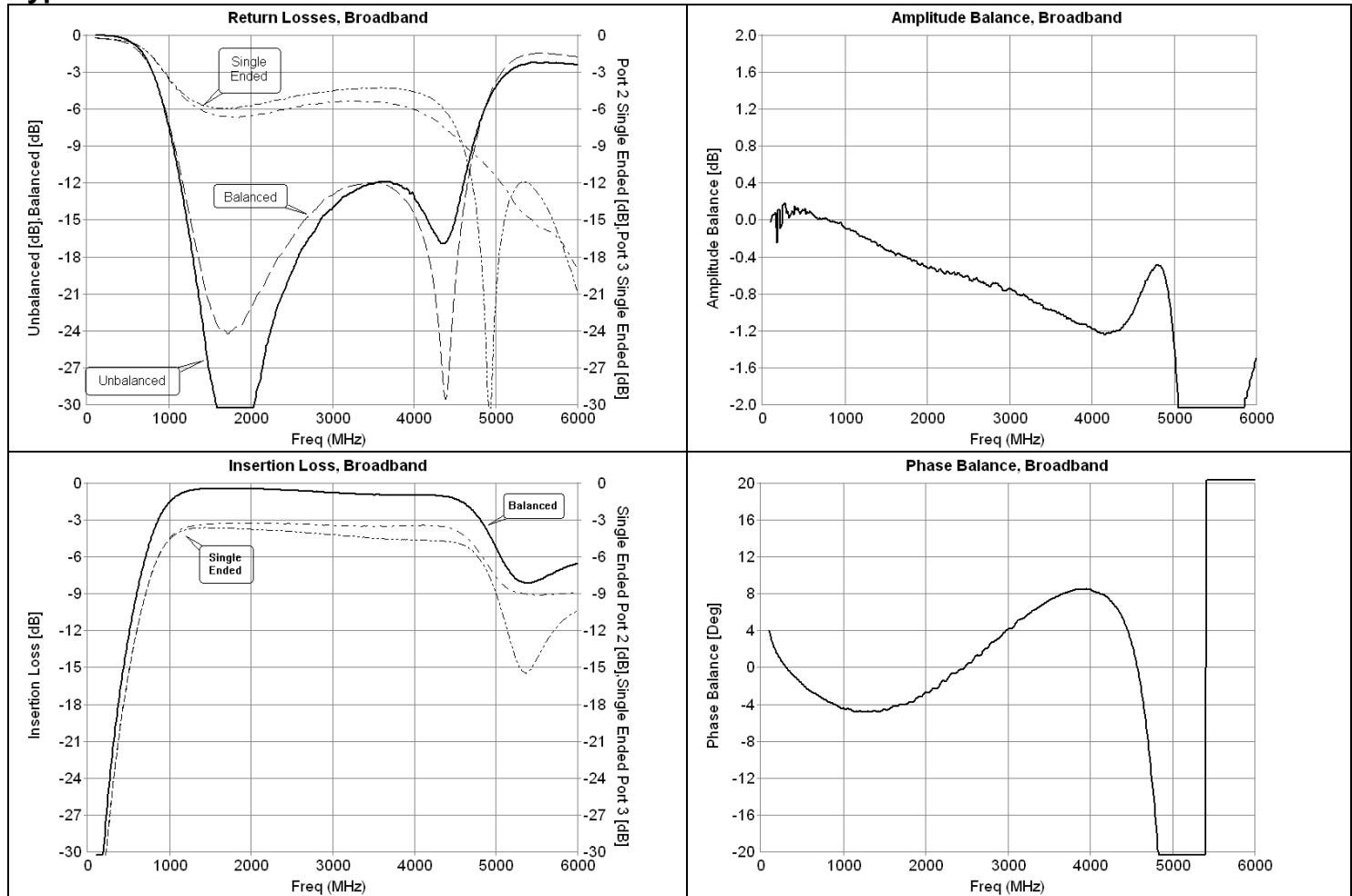
| Features:                      | Parameter                 | ROOM (25°C) |      |     | Unit    |
|--------------------------------|---------------------------|-------------|------|-----|---------|
|                                |                           | Min.        | Typ. | Max |         |
| • 1.7 – 2.2 GHz                | Frequency                 | 1.7         |      | 2.2 | GHz     |
| • 0.7mm Height Profile         | Unbalanced Port Impedance |             | 50   |     | Ω       |
| • 50 Ohm to 2 x 100 Ohm        | Balanced Port Impedance   |             | 200  |     | Ω       |
| • DCS/PCS/ UMTS/CDMA           | Return Loss               | 15          | 20   |     | dB      |
| • Low Insertion Loss           | Insertion Loss*           |             | 0.5  | 0.7 | dB      |
| • Input to Output DC Isolation | Amplitude Balance         |             | 0.6  | 0.9 | dB      |
| • Surface Mountable            | Phase Balance             |             | 4    | 8   | Degrees |
| • Tape & Reel                  | Power Handling            |             |      | 2   | Watts   |
| • Non-conductive Surface       | Operating Temperature     | -55         |      | +85 | °C      |
| • RoHS Compliant               |                           |             |      |     |         |
| • Halogen Free                 |                           |             |      |     |         |

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

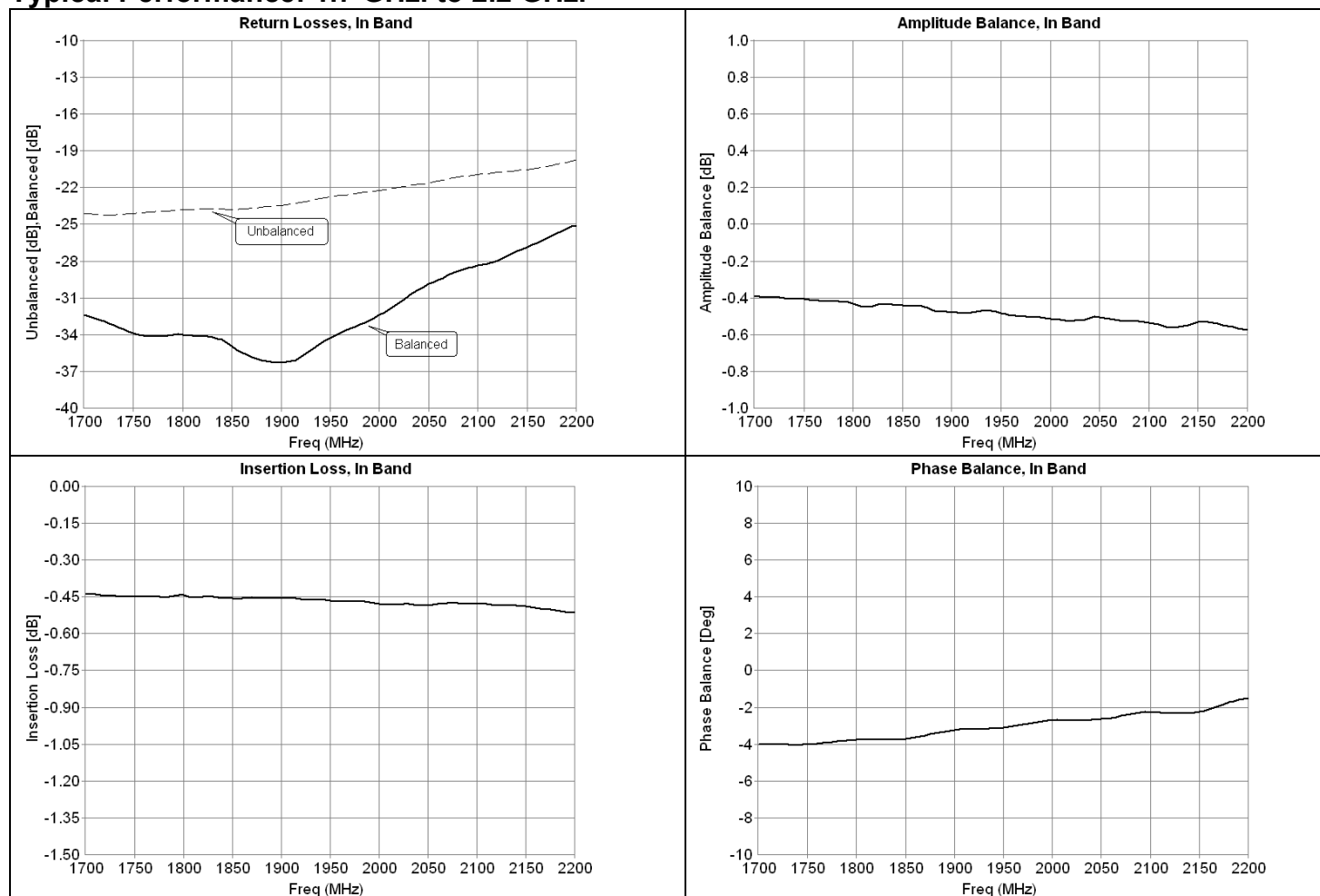
### Outline Drawing



## Typical Broadband Performance: 0 GHz. to 6.0 GHz.



### Typical Performance: 1.7 GHz. to 2.2 GHz.



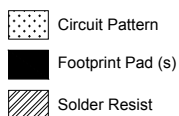
## Mounting Configuration:

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.

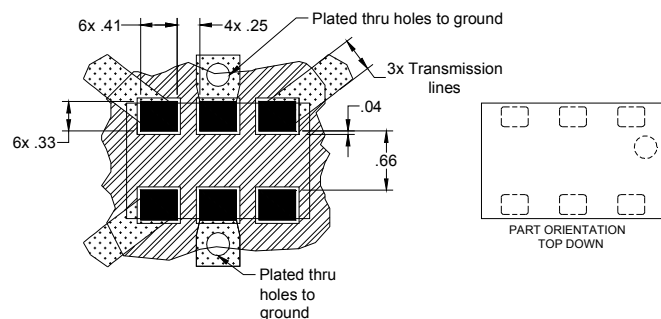
All of the Xinger components are constructed from organic PTFE based composites which possess excellent electrical and mechanical stability. Xinger components are compliant to a variety of ROHS and Green standards and ready for Pb-free soldering processes. Pads are Gold plated with a Nickel barrier.

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

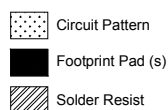
### No Bias Footprint



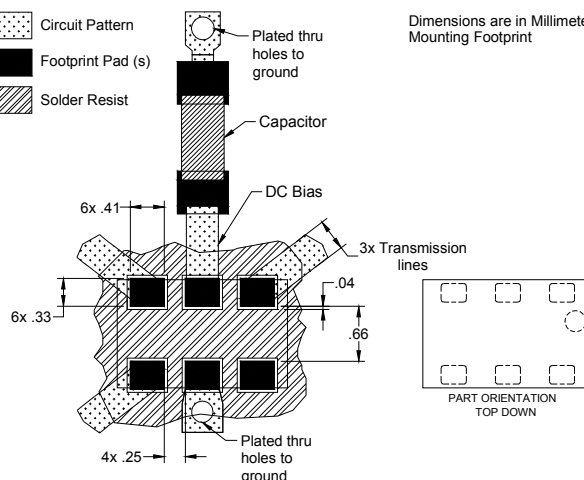
Dimensions are in Millimeters  
Mounting Footprint



### DC Bias Footprint

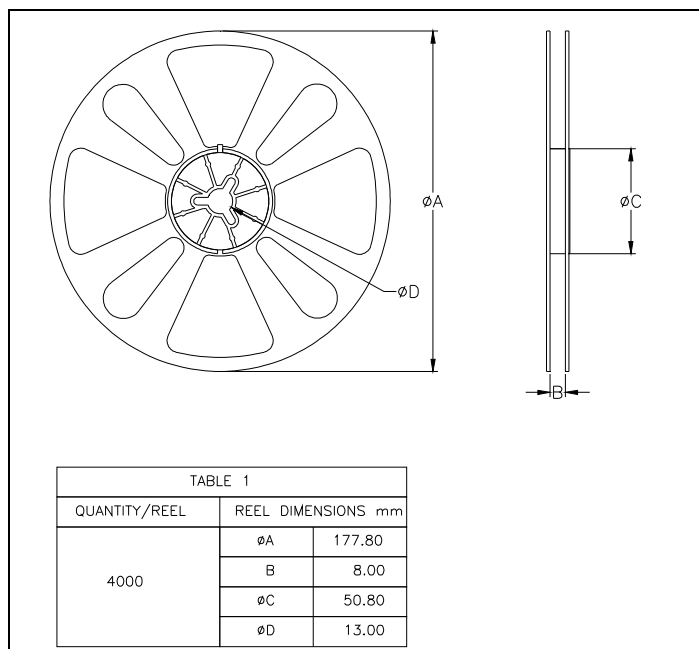
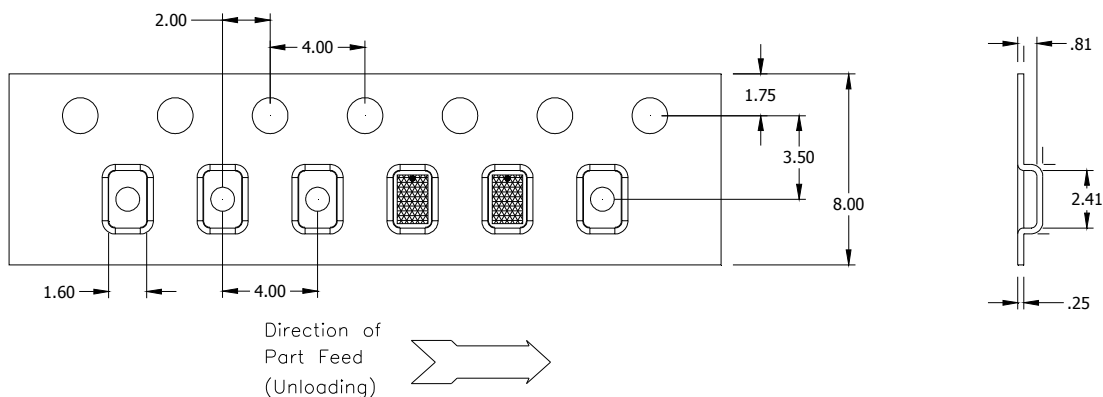


Dimensions are in Millimeters  
Mounting Footprint



### 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

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