Version: December 01, 2022

DEMIT Electronics Co., Ltd.

General Info. of Balun Transformer

<u>Web:www.direct-token.com</u> <u>Email:rfq@direct-token.com</u>

DeMint Electronics Co., Ltd.

China:

na: 17P, Nanyuan Maple Leaf Bldg., Nanshan Ave., Nanshan Dist., Shenzhen, Guangdong, China. 518054 Tel: +86 755 26055363

 Taiwan:
 No.137, Sec. 1, Zhongxing Rd., Wugu District, New Taipei City, Taiwan. 248012

 Tel: +886 2981 0109
 Fax: +886 2988 7487



General Information

Applications of Baluns

In a **RF balun transformer**, one pair of terminals is balanced, that is, the currents are equal in magnitude and opposite in phase. The other pair of terminals is unbalanced; one side is connected to electrical ground and the other carries the signal. Balun transformers can be used between various parts of a wireless or cable communications system. Some common applications denotes as following:

- Television receiver (Balanced) coaxial cable network or Coaxial antenna system (Unbalanced)
- FM broadcast receiver (Balanced) Coaxial antenna system (Unbalanced)
- Dipole antenna (Balanced) Coaxial transmission line (Unbalanced)
- Parallel-wire transmission line (Balanced) Coaxial transmitter output, or Coaxial receiver input (Unbalanced)

DeMint's baluns provide impedance transformation in addition to conversion between balanced and unbalanced signal modes. Most television and FM broadcast receivers are designed for 300-ohm balanced systems, while coaxial cables have characteristic impedances of 50 or 75 ohms. Impedance-transformer baluns with larger ratios are available and used to match high-impedance balanced antennas to low-impedance unbalanced wireless receivers, transmitters, or transceivers.

