

RF BALUN TRANSFORMERS

Transformers for Wideband RF Applications



- Ⓛ Low cost construction
- Ⓛ Miniature surface mount package
- Ⓛ Excellent insertion loss
- Ⓛ Ideal for balanced-to-unbalanced applications
- Ⓛ Designed for:
 - CATV Distribution/Drop Amplifiers
 - Set Top Boxes
 - Home Gateways

Electrical Specifications @ 25°C — Operating Temperature -40°C to +85°C

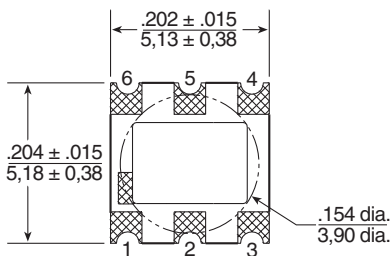
Part Number	Impedance Ratio ¹ (Pri:Sec ±2%)	Insertion Loss ²			Return Loss			Phase Unbalance (50-1000 MHz)	Amplitude Unbalance	
		10 MHz (TYP / MAX)	50-750 MHz (TYP / MAX)	750-1000 MHz (TYP / MAX)	10 MHz (TYP / MIN)	50-750 MHz (TYP / MIN)	750-1000 MHz (TYP / MIN)		(50 MHz)	(100-1000 MHz)
CX2024	1:1	0.46/1.00 dB	0.37/0.50 dB	0.48/0.60 dB	>40/20 dB	>30/20 dB	30/16 dB	20 deg. MAX	1.4 dB MAX	1.25 dB MAX

NOTE: Optional cover plate available. Part with cover plate is designated CX2024A. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (ex: CX2024T or CX2024AT).

Mechanical

Schematic

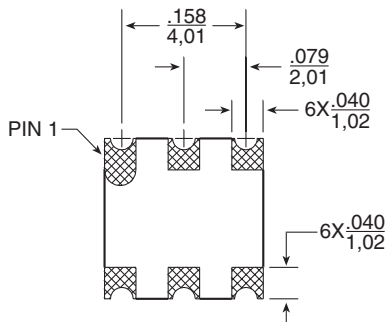
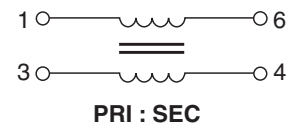
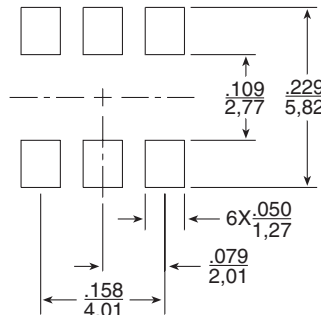
CX2024



NOTE: CX2024A has optional cover plate



SUGGESTED PAD LAYOUT



Tape & Reel 2000 /reel
Tray 100 /tray
Power Rating30 mA MAX; 0.25 W MAX

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

RF BALUN TRANSFORMERS

Transformers for Wideband RF Applications



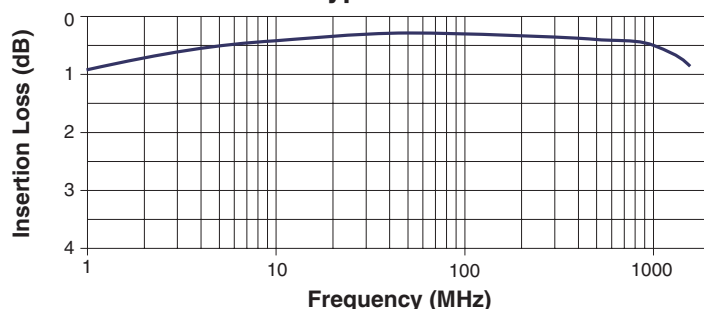
Application Notes

- Bandwidth specifications for **CX2024** are for a 75 Ω system.
- Materials used in the products are UL94-V0 recognized. Products meet requirements of IEC 695-2-2 (Needle Flame Test).
- For additional impedance ratios and frequency ranges, please contact Applications Engineering.
- Pick and place operation: smooth upper surface of device allows automatic pick and place.

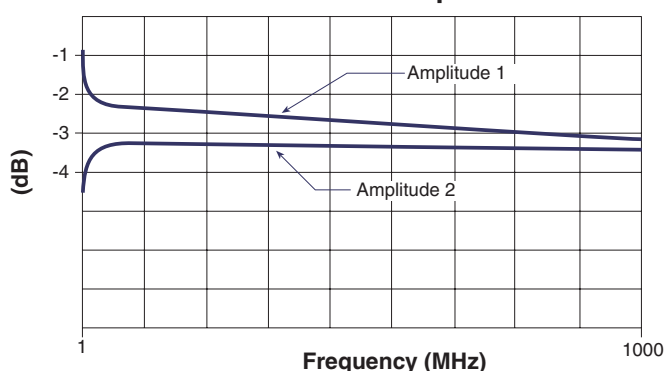
Notes from Tables

- Impedance and turns ratios are specified primary:secondary.
- These transformers are verified to operate from -40°C to +85°C. Contact Applications Engineering for performance data.

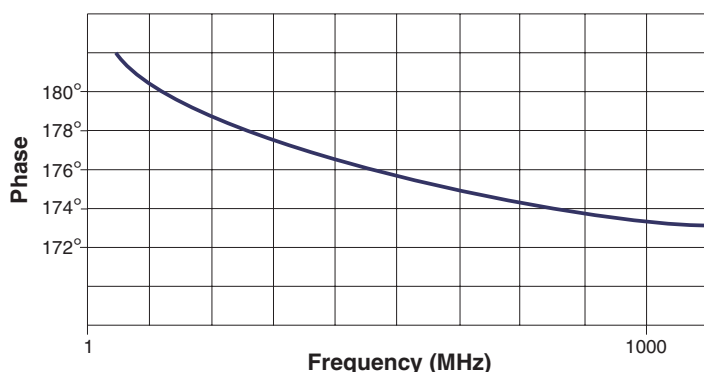
CX2024 - Typical Insertion Loss



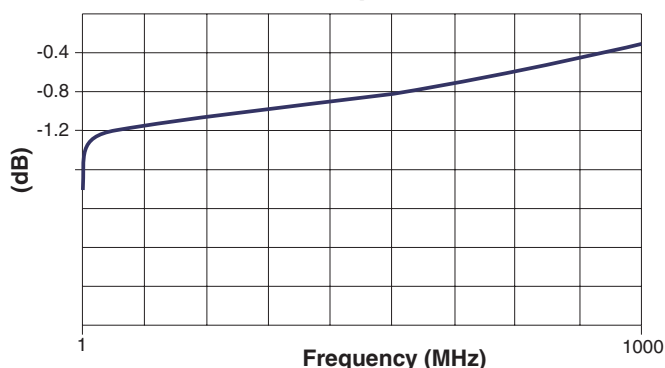
CX2024 - Amplitude



CX2024 - Phase Unbalance



CX2024 - Amplitude Unbalance



For More Information :

UNITED STATES (Worldwide)	UNITED KINGDOM (Northern Europe)	FRANCE (Southern Europe)	SINGAPORE (Southern Asia)	TAIWAN, R.O.C. (Northern Asia)	HONG KONG (Great China)	DISTRIBUTOR
12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262	1 & 2 Huxley Road The Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701	Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41	150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 287 8998 FAX: 65 280 0080	3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948	19/F, China United Plaza 1008 Tai Nan West Street Cheung Sha Wan, Kowloon Hong Kong, China TEL: 852 2788 6588 FAX: 852 2776 1055	

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.