

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

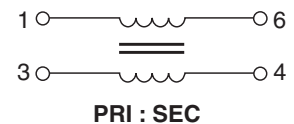
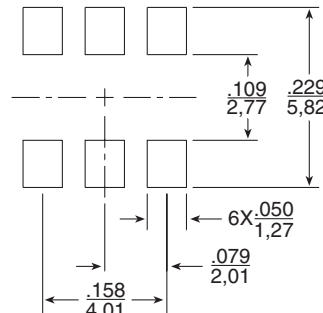
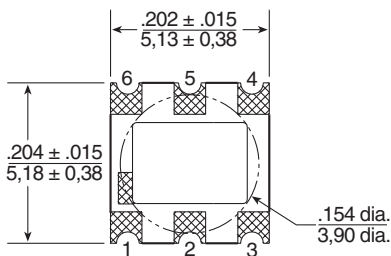
Part Number	Impedance Ratio ¹ (Pri:Sec ±2%)	Insertion Loss ²			Return Loss			Phase Unbalance (50-1000 MHz)	Amplitude Unbalance	
		10 MHz (TYP / MAX)	50-750 MHz (TYP / MAX)	750-1000 MHz (TYP / MAX)	10 MHz (TYP / MIN)	50-750 MHz (TYP / MIN)	750-1000 MHz (TYP / MIN)		(50 MHz)	(100-1000 MHz)
CX2024	1:1	0.46/1.00 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

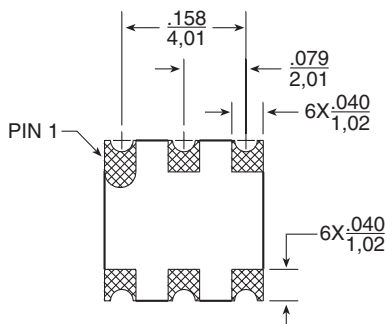
Schematic

CX2024



NOTE: CX2024A has optional cover plate

SUGGESTED PAD LAYOUT



Tape & Reel2000 /reel
Tray100 /tray
Power Rating30 mA MAX; 0.25 W MAX

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

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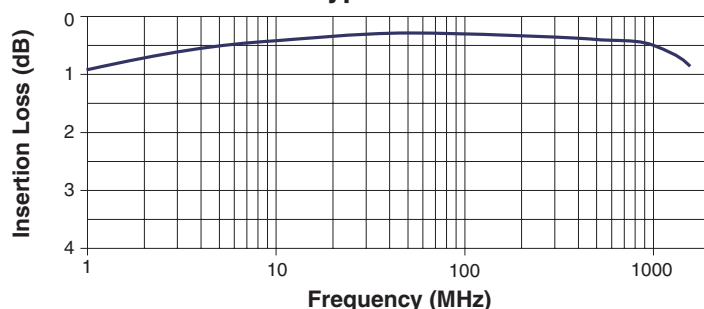
Application Notes

- 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.

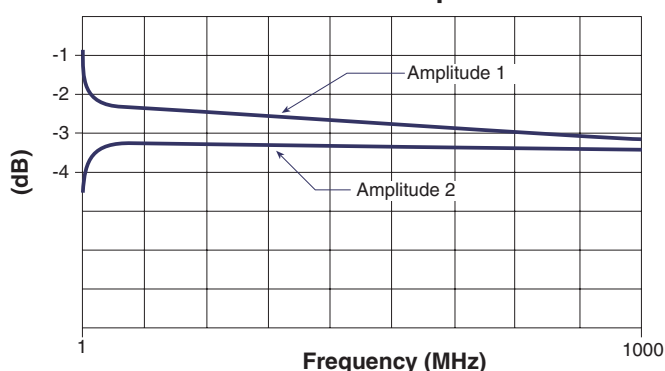
Notes from Tables

- 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.

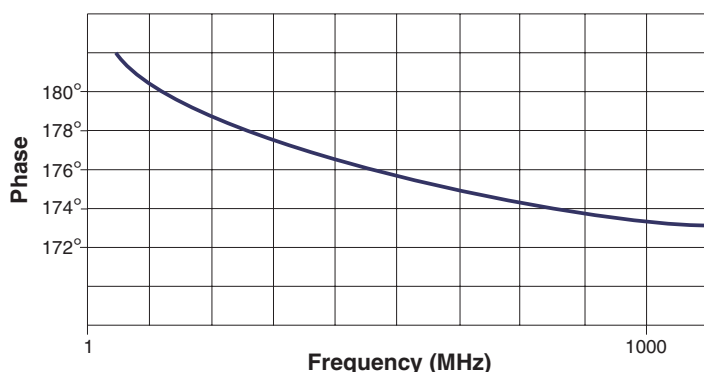
CX2024 - Typical Insertion Loss



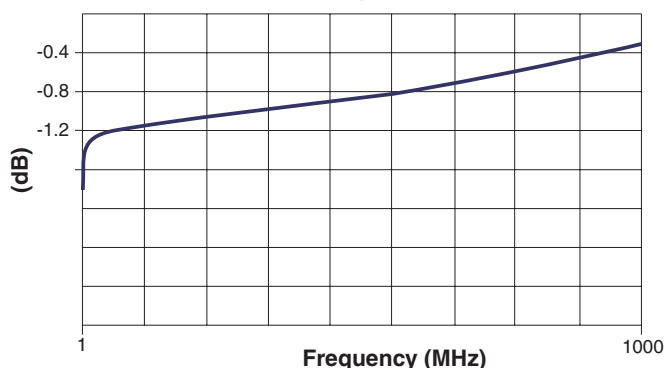
CX2024 - Amplitude



CX2024 - Phase Unbalance



CX2024 - Amplitude Unbalance



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