

RF TRANSFORMERS

Transformers for Wideband RF Applications



- ⊕ Miniature surface mount package
- ⊕ Various impedance ratios available
- ⊕ Excellent insertion loss
- ⊕ Ideal for Balanced-to-Unbalanced applications
- ⊕ Products from .5 to 1500 MHz bandwidth

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

Part Number	Impedance Ratio ¹ Pri:Sec (±2%)	Turns Ratio Pri:Sec (±2%)	Bandwidth ^{2,3} (MHz TYP)			Insertion Loss @ Midband (dB TYP)	Schematic	Primary Pins
			3 dB	2 dB	1 dB			
CX2040	1:1	1:1	1.5-500	2.5-400	5-350	0.9	A	4-6
CX2043	1.5:1	√1.5:1	—	—	1-1000	0.2	D	3-6
CX2044	1.5:1	√1.5:1	—	1.0-500	5-100	0.2	A	1-3
CX2045	1:2	1:1.414	—	—	3-300	0.8	B	4-6
CX2047	1:4CT	1:2CT	—	.5-300	1.5-100	0.24	B	4-6
CX2049	1:8CT	1:2.83CT	2-500	—	—	TBD	B	4-6

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

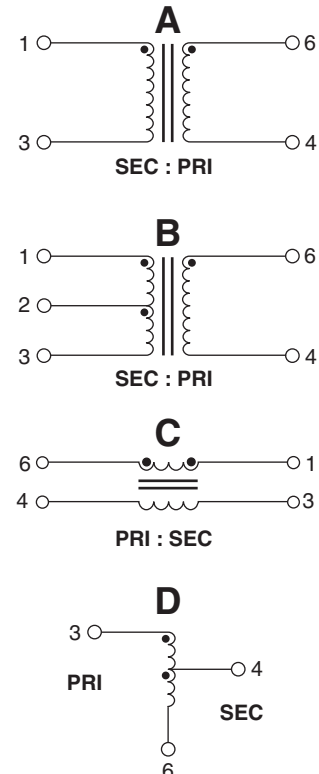
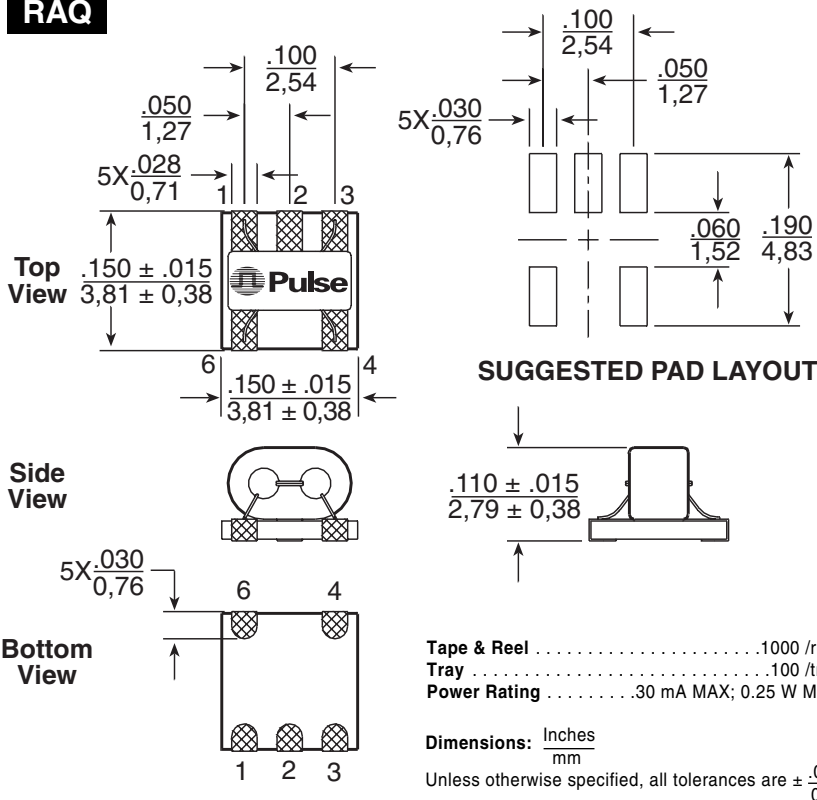
Part Number	Impedance Ratio ¹ Pri:Sec (±2%)	Bandwidth ^{2,3} (MHz TYP)		Schematic	Primary Pins
		2 dB	1 dB		
CX2038	75 Ω:75 Ω	Up to 1500	4.5-1000	C	4-6
CX2039	50 Ω:50 Ω	Up to 1500	4.5-1000	C	4-6

NOTE: Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (ex: CX2040T).

Mechanical

Schematics

RAQ



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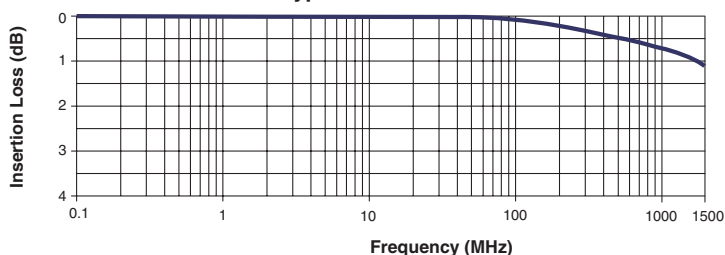
Application Notes

- Bandwidth specifications for **CX2040** and **CX2047** are for a 50 Ω system.
- Materials used in the products are UL94-V0 recognized. Products meet requirements of IEC 695-2-2 (Needle Flame Test).
- CX2038**, **CX2039** and **CX2043** transformer configurations do not provide DC isolation between primary and secondary windings.
- 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.

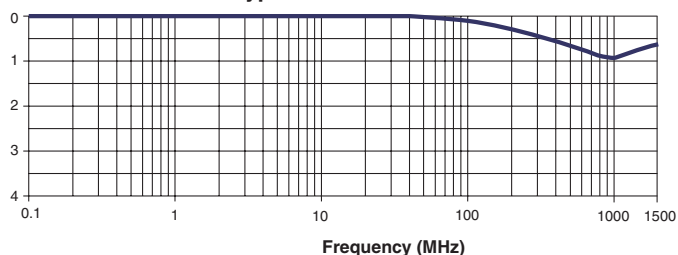
Notes from Tables

- Impedance and turns ratios are specified primary:secondary. (CT=Center Tap).
- Bandwidth is referenced to midband loss.
- These transformers are verified to operate from -40°C to +85°C. Contact Applications Engineering for performance data.

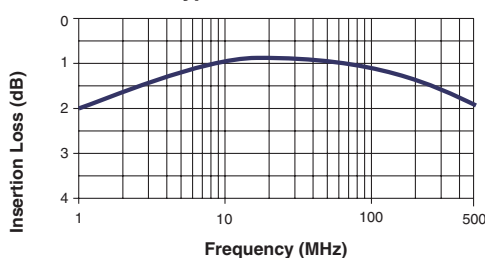
CX2038 - Typical Insertion Loss @ 25°C



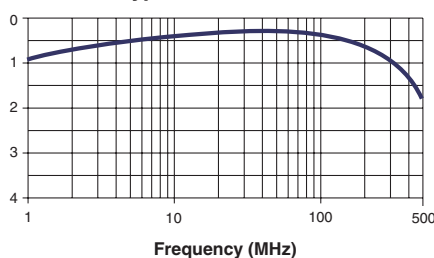
CX2039 - Typical Insertion Loss @ 25°C



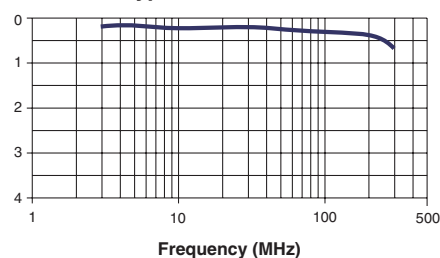
CX2040 - Typical Insertion Loss @ 25°C



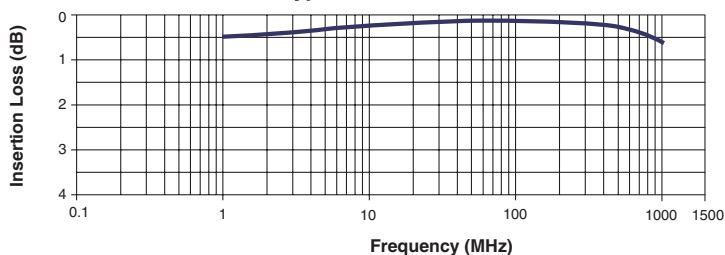
CX2044 - Typical Insertion Loss @ 25°C



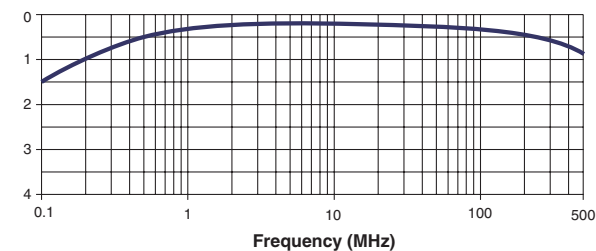
CX2045 - Typical Insertion Loss @ 25°C



CX2043 - Typical Insertion Loss @ 25°C



CX2047 - Typical Insertion Loss @ 25°C



For More Information :

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