

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 0.5 to 1500MHz 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
			3dB	2dB	1dB			
CX2040	1:1	1:1	1.5-500	2.5-400	5-350	0.90	A	4-6
CX2043	1.5:1	√1.5:1	—	—	1-1000	0.20	D	3-6
CX2044	1.5:1	√1.5:1	—	1.0-500	5-100	0.20	A	1-3
CX2045	1:2CT	1:1.414CT	—	—	3-300	0.80	B	4-6
CX2047	1:4CT	1:2CT	—	0.5-300	1.5-100	0.24	B	4-6

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

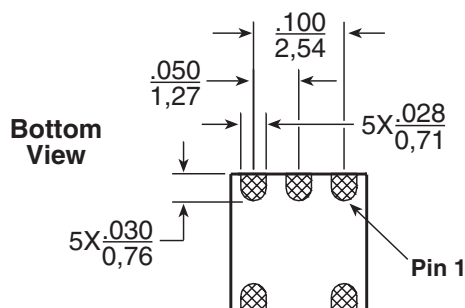
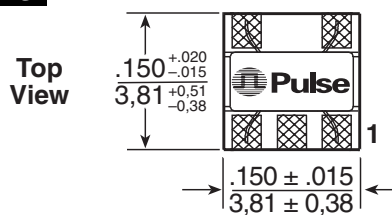
Part Number	Impedance Ratio ¹ Pri:Sec (±2%)	Bandwidth ^{2,3} (MHz TYP)		Schematic	Primary Pins
		2dB	1dB		
CX2038	75Ω:75Ω	Up to 1500	4.5-1000	C	4-6
CX2039	50Ω:50Ω	Up to 1500	4.5-1000	C	4-6

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

Mechanical

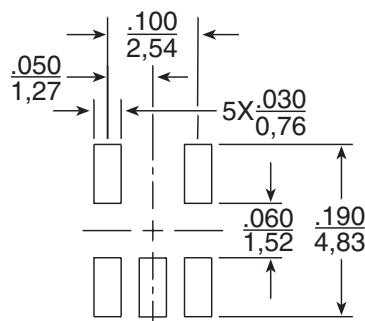
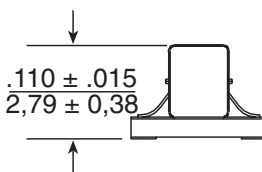
Schematics

RAQ

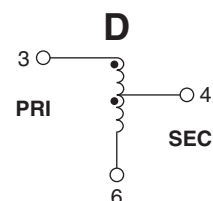
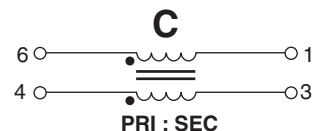
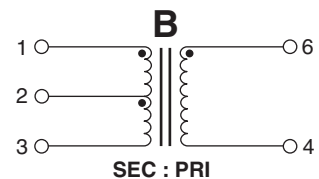
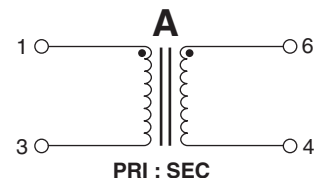


Tape & Reel1000 /reel
Tray100 /tray
Power Rating30 mA MAX; 0.25 W MAX

Dimensions: Inches
mm
Unless otherwise specified, all tolerances are ± .010 / 0.25



SUGGESTED PAD LAYOUT



RF TRANSFORMERS

Transformers for Wideband RF Applications



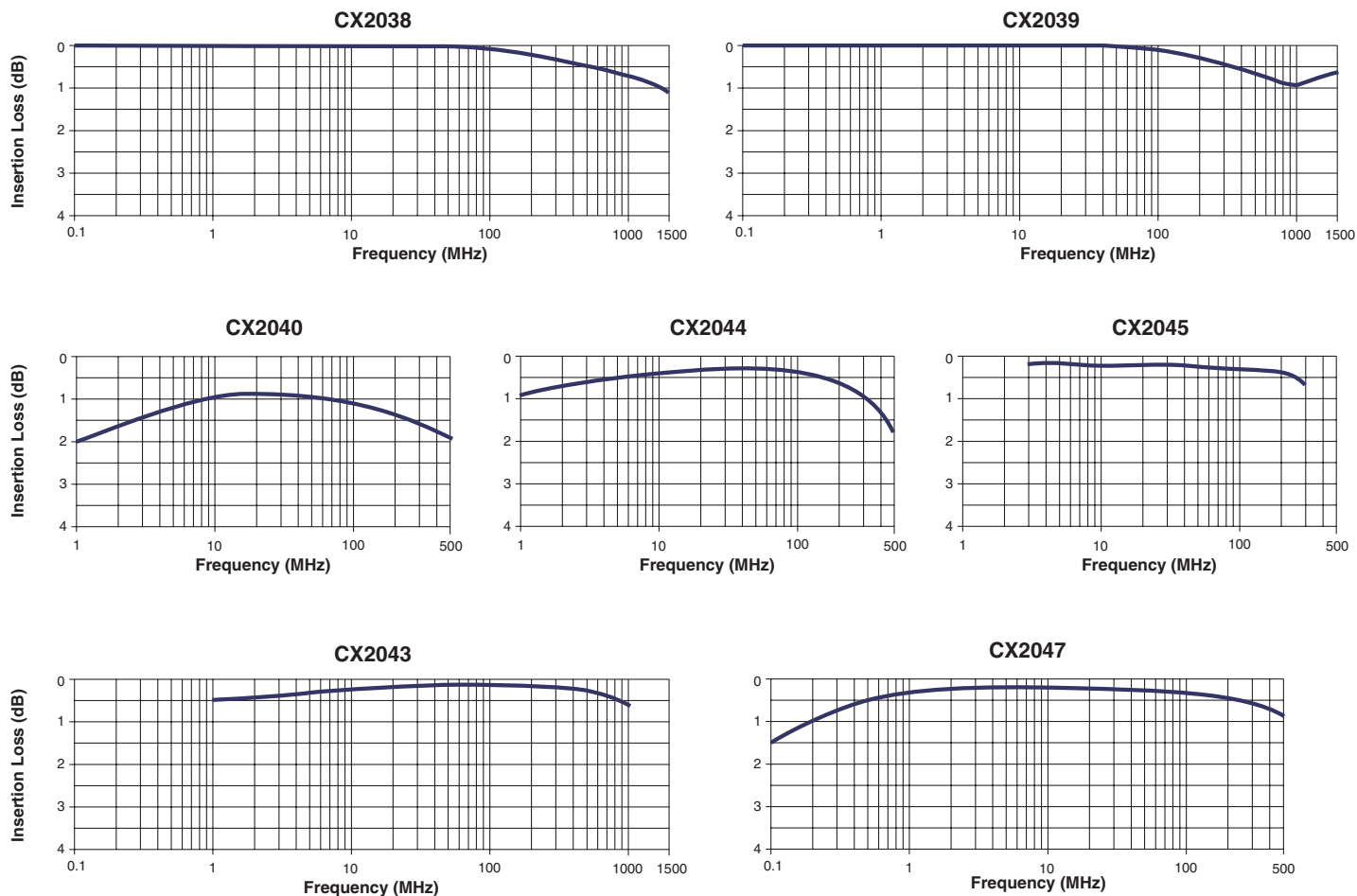
Application Notes

- Bandwidth specifications for **CX2040** and **CX2047** are for a 50Ω 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 Pulse Applications Engineering.
- Pick and place operation: smooth upper surface of device allows automatic pick and place.
- For availability of Lead-Free version of this product, please contact Pulse.

Notes from Tables

- Impedance & 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 Pulse Applications Engineering for performance data.

Typical Insertion Loss @ 25°C



For More Information :

UNITED STATES (Worldwide)

12220 World Trade Drive
San Diego, CA 92128
U.S.A.
<http://www.pulseeng.com>
TEL: 858 674 8100
FAX: 858 674 8262

UNITED KINGDOM (Northern Europe)

5 Huxley Road
Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

FRANCE (Southern Europe)

Zone Industrielle
F-39270
Orgelet
France
TEL: 33 3 84 35 04 04
FAX: 33 3 84 25 46 41

SINGAPORE (Southern Asia)

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 6287 8998
FAX: 65 6280 0080

TAIWAN, R.O.C. (Northern Asia)

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

HONG KONG (China/Hong Kong)

9/F, Phase 2, Tai Sang
Shatin Warehouse Centre
6 Wong Chuk Yeung Street
Fotan, Shatin, Hong Kong
TEL: 852 2788 6588
FAX: 852 2776 1055

DISTRIBUTOR

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 products and/or registered trademarks of their respective owners.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse:

[CX2039LT](#) [CX2045T](#) [CX2043T](#) [CX2047T](#) [CX2039L](#) [CX2039T](#) [CX2038L](#) [CX2038LT](#) [CX2038T](#) [CX2040T](#)
[CX2044T](#) [CX2047](#) [CX2040](#) [CX2045](#) [CX2044](#) [CX2043](#) [CX2039](#) [CX2038](#)