WIDEBAND RF TRANSFORMERS
Upstream Transformers for Set-Top Box and Cable Modem Applications

- Optimized for 5-80 MHz operating frequency
- Less than 20 dB return loss
- Excellent insertion loss
- Operating temperature of -40°C to +85°C

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

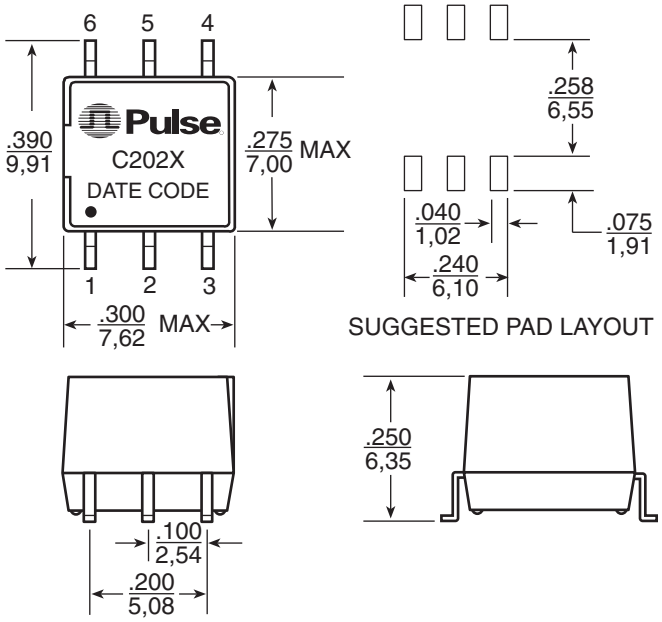
Part Number	Impedance Ratio[1] Pri:Sec (±2%)	Turns Ratio Pri:Sec (±2%)	Bandwidth [2, 3] (MHz TYP)			Insertion Loss @ Midband (dB TYP)	OCL Primary (µH MIN)	Return Loss[4] 5 MHz - 65 MHz (dB TYP)	Schem.	Primary Pins
			3 dB	2 dB	1 dB					
C2020	1CT:1CT	1CT:1CT	.150-210	.200-150	.350-90	.54	35	>20 dB	A	1-3
C2022	1:4CT	1:2CT	.100-500	.150-390	.300-220	.45	50	>20 dB	B	1-3

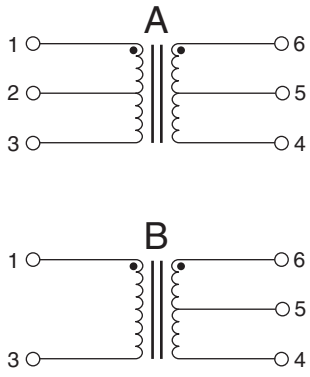
NOTE: Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (ex: C2020**T**).

Mechanical

Schematics

LS





Weight . . . . . .0.6 grams
Tape & Reel 500/reel
Tube 70/tube

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

WIDEBAND RF TRANSFORMERS
Upstream Transformers for Set-Top Box and Cable Modem Applications

Application Notes

A. These transformers have been optimized for use in the upstream interface for cable modems and set-top box applications. The 5-80 MHz frequency range is well-suited for MCNS-DOCSIS, Euro-DOCSIS/Davic/DVB product development.

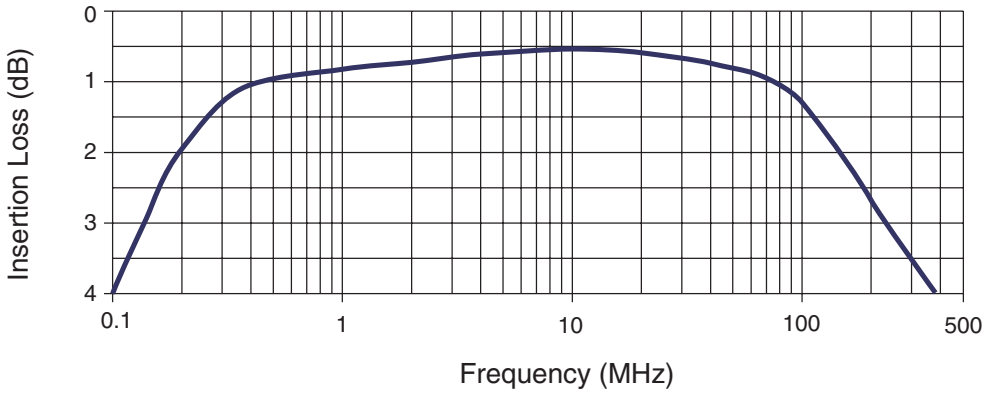
B. Bandwidth specifications are for a 75 Ω system.

C. Materials used in the products are UL94-V0 recognized. Products meet the requirements of IEC 695-2-2 (Needle Flame Test).

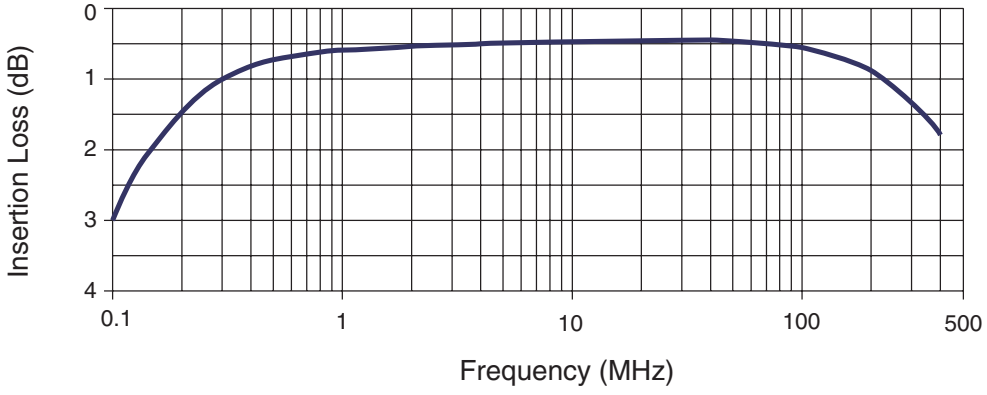
Notes from Tables

1. Impedance and turns ratios are specified primary:secondary. (CT=Center Tap).
2. Bandwidth is referenced to midband loss.
3. The insertion loss of these transformers is verified from -40°C to +85°C. Insertion loss over this temperature range is less than 1 dB from 5-80 MHz (relative to midband loss).
4. Return loss performance changes with change in temperature.

C2020 - Typical Insertion Loss



C2022 - Typical Insertion Loss



For More Information :

UNITED STATES (Worldwide)
12220 World Trade Drive
San Diego, CA 92128
Quick-Facts: 858 674 9672
http://www.pulseeng.com
TEL: 858 674 8100
FAX: 858 674 8262

UNITED KINGDOM (Northern Europe)
1 & 2 Huxley Road
The 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: 65 287 8998
FAX:65 280 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

DISTRIBUTOR