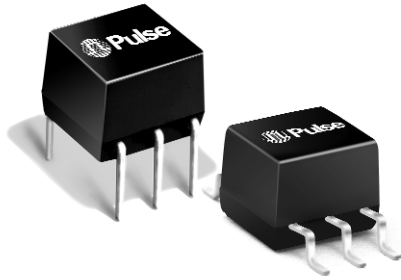


# RF TRANSFORMERS

## Surface Mount and Through Hole



- Operating bandwidth of .08 MHz to 400 Mhz
- Peak IR reflow temperature rating of 235°C
- Excellent insertion loss and return loss
- Various impedance ratios available

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

| Part Number          | Impedance Ratio <sup>1</sup><br>(Pri:Sec) | Turns Ratio <sup>1</sup><br>(Pri:Sec) | Bandwidth <sup>2</sup><br>(3 dB, MHz) | Schematic | Primary Pins |
|----------------------|---|---------------------------------------|---------------------------------------|-----------|--------------|
| <b>SURFACE MOUNT</b> |   |                                       |                                       |           |              |
| CX2050               | 1:1                                       | 1:1                                   | .15-400                               | A         | 4-6          |
| CX2052               | 1:1CT                                     | 1:1CT                                 | .08-200                               | B         | 4-6          |
| CX2054               | 1:4CT                                     | 1:2CT                                 | .20-350                               | B         | 4-6          |
| CX2059               | 1:9                                       | 1:3                                   | .15-200                               | A         | 4-6          |
| <b>THROUGH HOLE</b>  |   |                                       |                                       |           |              |
| CX2060               | 1:1                                       | 1:1                                   | .15-400                               | A         | 4-6          |
| CX2062               | 1:1CT                                     | 1:1CT                                 | .08-200                               | B         | 4-6          |
| CX2064               | 1:4CT                                     | 1:2CT                                 | .20-350                               | B         | 4-6          |
| CX2065               | 1:4CT                                     | 1:2CT                                 | .02-250                               | B         | 4-6          |
| CX2068               | 1:12.25                                   | 1:3.5                                 | .20-150                               | C         | 1-3          |

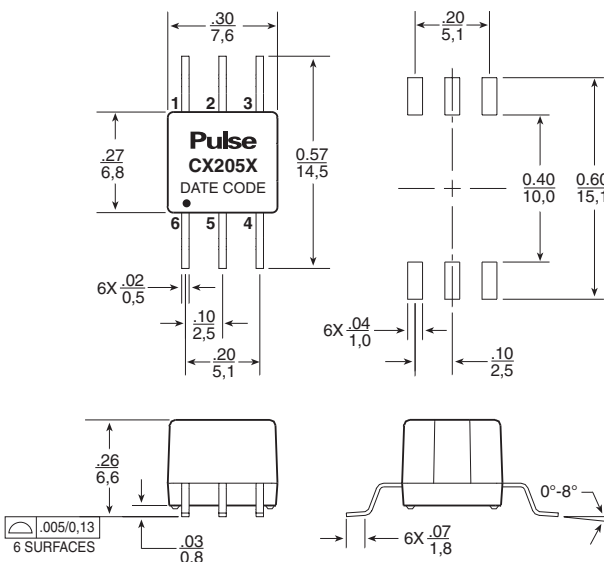
**NOTE:** Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the surface mount part numbers (ex: CX2050T).  
Bandwidth is referenced to midband loss.

## Mechanicals

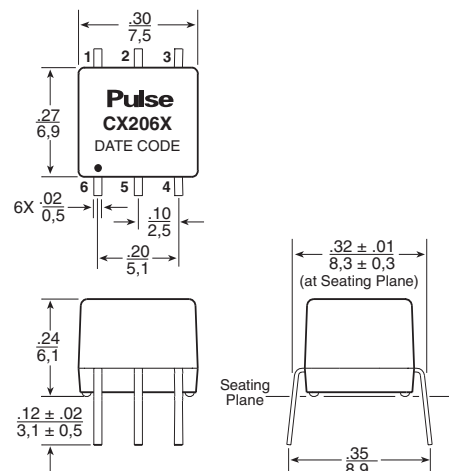
## Schematics

### STRA

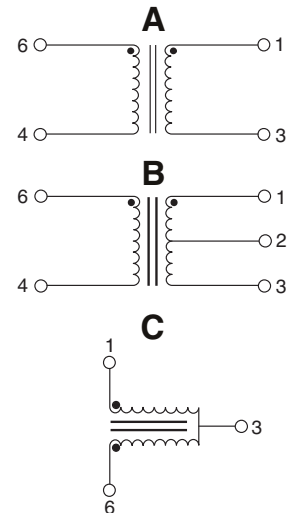
#### Surface Mount



#### Through Hole



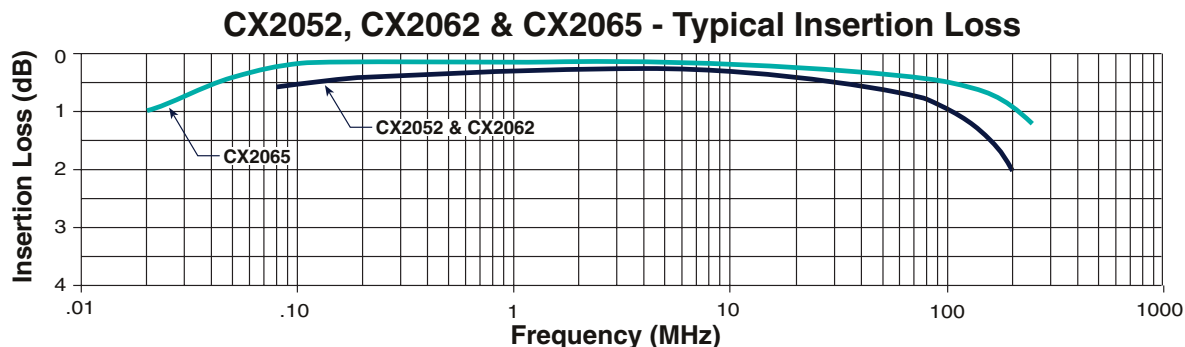
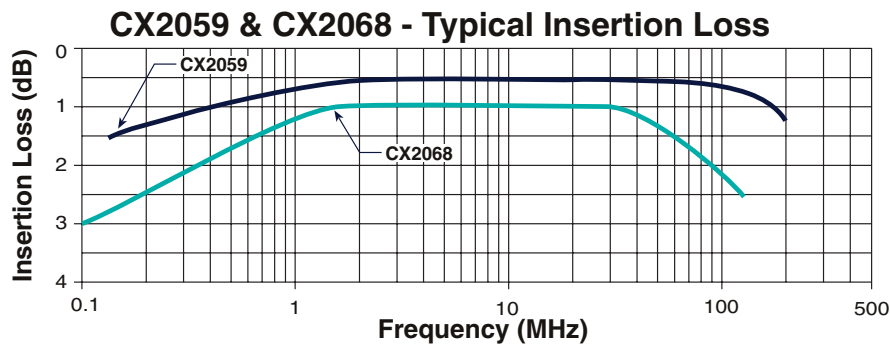
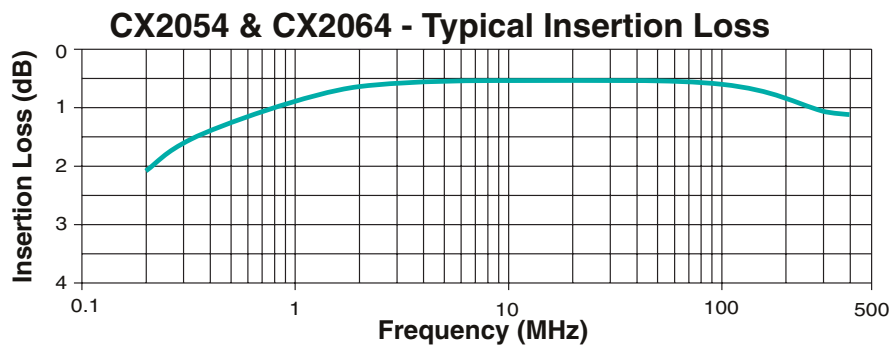
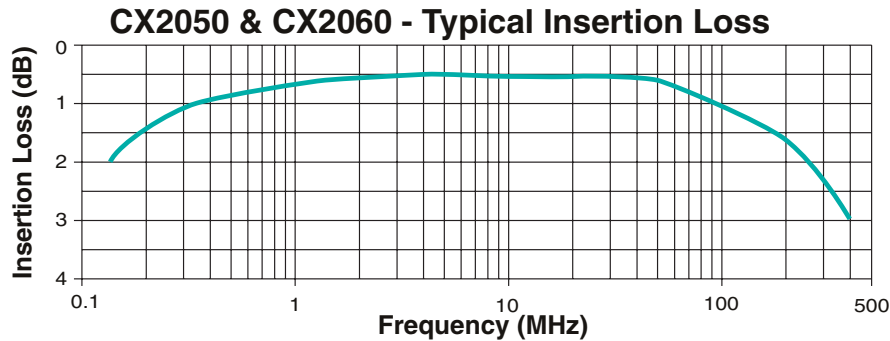
**Dimensions:** Inches  
mm  
Unless otherwise specified,  
all tolerances are ± .010  
0,25



**RF Power** ..... .025 watts  
**Absolute DC Current** ..... .30 mA  
**Weight** ..... .0.6 grams  
**Tape & Reel** ..... .475/reel  
**Tube** ..... .65/tube

# RF TRANSFORMERS

## Surface Mount and Through Hole



### Application Notes

- A. Bandwidth specifications are for a 75  $\Omega$  system.
- B. 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. Contact Pulse Applications Engineering for extended temperature performance data.
- 4. Return loss performance changes with change in temperature.

### For More Information :

| UNITED STATES<br>(Worldwide)  | UNITED KINGDOM<br>(Northern Europe)  | FRANCE<br>(Southern Europe)   | SINGAPORE<br>(Southern Asia)  | TAIWAN, R.O.C.<br>(Northern Asia)   | HONG KONG<br>(China/Hong Kong)  | DISTRIBUTOR |
|---|--|---|---|---|---|-------------|
| 12220 World Trade Drive<br>San Diego, CA 92128<br>U.S.A.<br>http://www.pulseeng.com<br>TEL: 858 674 8100<br>FAX: 858 674 8262 | 1 & 2 Huxley Road<br>The Surrey Research Park<br>Guildford, Surrey GU2 5RE<br>United Kingdom<br>TEL: 44 1483 401700<br>FAX: 44 1483 401701 | Zone Industrielle<br>F-39270<br>Orgelet<br>France<br>TEL: 33 3 84 35 04 04<br>FAX: 33 3 84 25 46 41 | 150 Kampong Ampat<br>#07-01/02<br>KA Centre<br>Singapore 368324<br>TEL: 65 6287 8998<br>FAX: 65 6280 0080 | 3F-4, No. 81, Sec. 1<br>HsinTai Wu Road<br>Hsi-Chih, Taipei Hsien<br>Taiwan, R.O.C.<br>Tel: 886 2 2698 0228<br>FAX: 886 2 2698 0948 | 9/F, Phase 2, Tai Sang<br>Shatin Warehouse Centre<br>6 Wong Chuk Yeung Street<br>Fotan, Shatin, Hong Kong<br>TEL: 852 2788 6588<br>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 products and/or registered trademarks of their respective owners.

Printed on recycled paper. ©2003, Pulse Engineering, Inc. All Rights Reserved.

**C206.A (10/03)**