

# ADSL LINE TRANSFORMERS

## For Centillium ADSL CPE Chipsets



- Matched to Centillium's CopperFlite™ CT-L51ST81, Flite Optimizer™ CT-L52SU81, and Universal CopperFlite™ CT-L61ST81 chipsets
- Excellent THD performance in a small footprint
- Designed to meet UL1950 and EN60950 supplementary insulation requirements for working voltages up to 250 Vrms

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

| Part Number | Mounting | Turns Ratio<br>( $\pm 2\%$ )                             | Inductance<br>@ 10 kHz, 100 mV                 | Leakage Inductance<br>@ 100 kHz, 0.1 Vrms                    |
|-------------|----------|----------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------|
| BX2258      | SMT      | 1CS:1CS<br>(1-5) : (7-10) with (2-4) & (8-9) Shorted     | 5.0 mH $\pm 10\%$<br>(7-10) with (8-9) Shorted | 15 $\mu$ H Max<br>(1-2) with (4-5), (7-10), & (8-9) Shorted  |
| BX2259      | SMT      | 1CS:2.125CS<br>(1-4) : (6-10) with (2-3) & (7-9) Shorted | 5.0 mH $\pm 10\%$<br>(6-10) with (7-9) Shorted | 10 $\mu$ H Max.<br>(9-10) with (1-4), (2-3), & (6-7) Shorted |
| BX2353      | SMT      | 1CS:2.125CS<br>(1-4) : (7-10) with (2-3) & (8-9) Shorted | 5.0 mH $\pm 10\%$<br>(7-10) with (8-9) Shorted | 13 $\mu$ H Max.<br>(7-10) with (1-4), (2-3), & (8-9) Shorted |
| BX2358      | SMT      | 1CS:1CS<br>(1-4) : (7-10) with (2-3) & (8-9) Shorted     | 5.0 mH $\pm 10\%$<br>(7-10) with (8-9) Shorted | 15 $\mu$ H Max.<br>(7-10) with (1-4), (2-3), & (8-9) Shorted |

### Additional Electrical Specifications

| Part Number | Longitudinal Balance<br>(from 30 kHz to 1.1 MHz) | THD at 100 $\Omega$<br>(@ 30 kHz, 2.5 Vrms) | DC Resistance                                      |                                  | Isolation Voltage<br>(1 sec) |
|-------------|--------------------------------------------------|---------------------------------------------|----------------------------------------------------|----------------------------------|------------------------------|
| BX2258      | $\leq -40$ dB                                    | $\leq -85$ dB                               | 1.3 $\Omega$ MAX (1-2)<br>1.6 $\Omega$ MAX (4-5)   | 1.5 $\Omega$ MAX (7-9) = (8-10)  | 1,875 Vrms                   |
| BX2259      | $\leq -40$ dB                                    | $\leq -85$ dB                               | 0.35 $\Omega$ MAX (1-3)<br>0.40 $\Omega$ MAX (2,4) | 1.75 $\Omega$ MAX (6-7) = (9-10) | 1,875 Vrms                   |
| BX2353      | $\leq -40$ dB                                    | $\leq -85$ dB                               | 0.35 $\Omega$ MAX (1-3)<br>0.40 $\Omega$ MAX (2-4) | 1.75 $\Omega$ MAX (7-9) = (8-10) | 1,875 Vrms                   |
| BX2358      | $\leq -40$ dB                                    | $\leq -85$ dB                               | 1.0 $\Omega$ MAX (1-3)<br>1.3 $\Omega$ MAX (2-4)   | 1.1 $\Omega$ MAX (7-9) = (8-10)  | 1,875 Vrms                   |

**NOTE:** Transformers are shipped in trays unless Tape & Reel packaging is specified by adding the suffix "T" to the part number (i.e. BX2258T).

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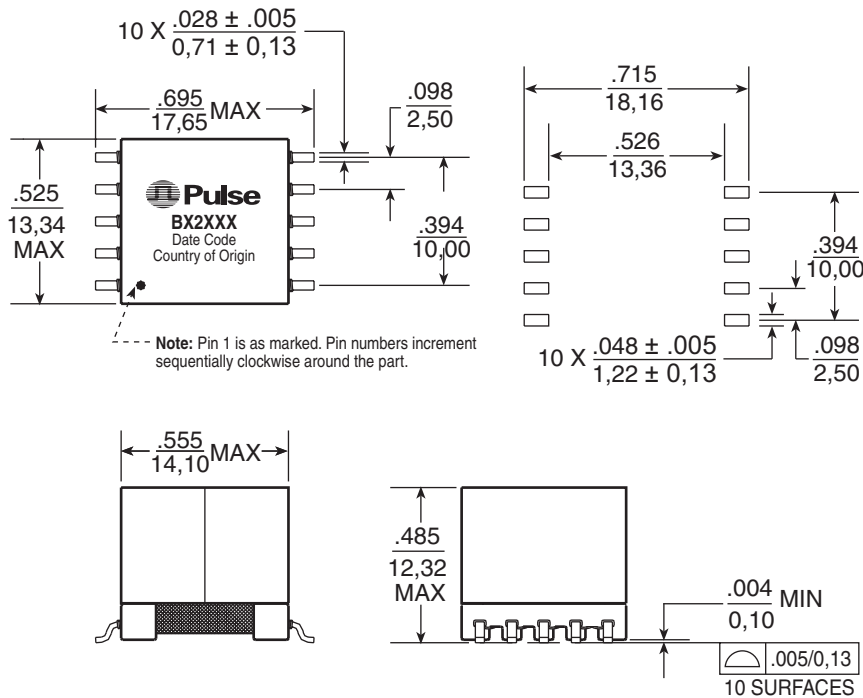
## For Centillium ADSL CPE Chipsets



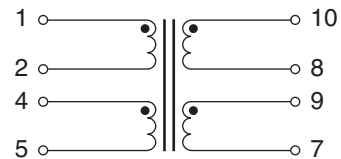
### Mechanical

### Schematics

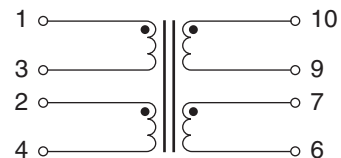
#### BX2XXX



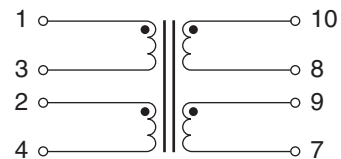
#### BX2258



#### BX2259



#### BX2353/BX2358



Weight .....6.2 grams  
Tape & Reel .....150/reel  
Tray .....60/tray

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

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