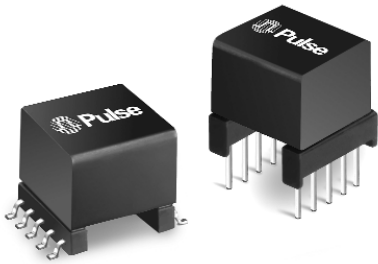


# HDSL2/G.SHDSL TRANSFORMER

## For Level One Chipsets



- Matched to Level One's SK70743, LXT772 and LXT776 chipsets
- Excellent THD performance
- Maximum height .485" (12,32 mm)
- Designed to meet UL 1950 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>Chip - Line<br>(±2%) | Inductance - Line Side<br>@10 kHz, 100 mV            | Leakage Inductance - Line Side<br>@ 100 kHz, 0.02 Vrms | DC Resistance                 |                               |
|--------------------|----------|-------------------------------------|--|--|-------------------------------|-------------------------------|
|                    |          |                                     |  |  | Line Side                     | Chip Side                     |
| B1056 <sup>1</sup> | SMT      | 1CT:3CS                             | 2.0 mH ±10% <sup>2</sup><br>(1-5) with (2-4) shorted | 20 µH MAX<br>(1-5) with (2-4) and (6,7,8,9) shorted    | ≤ 2.05 Ω MAX<br>(1-4) = (2-5) | ≤ 0.50 Ω MAX<br>(1-4) = (2-5) |
| B1083              | THT      | 1:3CS                               | 2.25 mH ±10%<br>(2-5) with (4-1) shorted             | 8 µH MAX<br>(2-5) with (4-1) and (10-6) shorted        | ≤ 3.30 Ω MAX<br>(2-4) = (1-5) | ≤ 0.75 Ω MAX<br>(10-6)        |

### Additional Electrical Specifications

| Part Number        | Longitudinal Balance         | THD                           | Interwinding Capacitance<br>(@ 100 kHz, 0.1 Vrms) | Return Loss                      | Isolation Voltage |
|--------------------|------------------------------|-------------------------------|---|----------------------------------|-------------------|
| B1056 <sup>1</sup> | ≤ -45 dB (20 KHz to 400 KHz) | ≤ -70 dB (@ 10 kHz, 5.0 Vrms) | ≤ 60 pF   | ≥ 16 dB (from 40 kHz to 300 kHz) | 1500 Vrms         |
| B1083              | ≤ -53 dB (10 KHz to 400 KHz) | ≤ -71 dB (@ 15 kHz, 3.8 Vrms) | Not Specified                                     | ≥ 12 dB (from 50 kHz to 2 MHz)   | 1500 Vrms         |

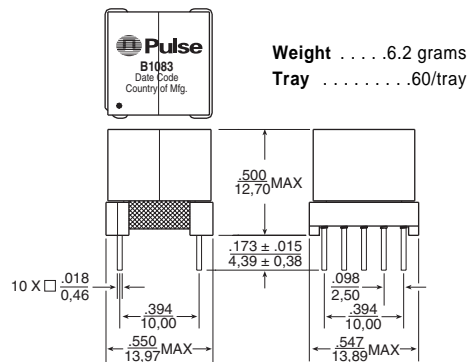
<sup>1</sup> Transformers are shipped in trays unless Tape & Reel packaging is specified by adding the suffix "T" to the part number (i.e. B1056T).

<sup>2</sup> DC bias current: 0 to 100 mA.

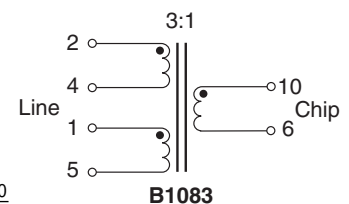
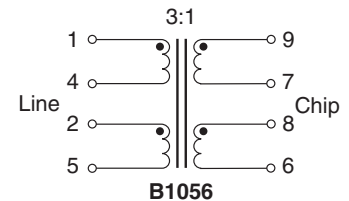
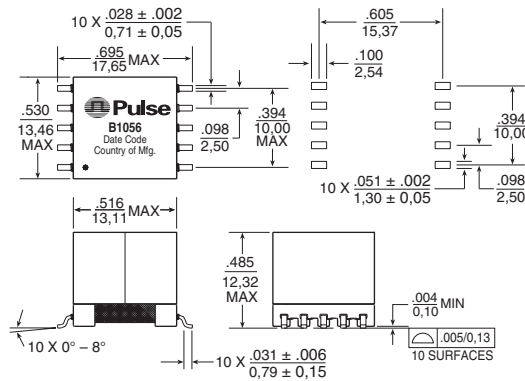
## Mechanicals

## Schematics

### B1083



### B1056



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

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

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**B965.A (12/03)**