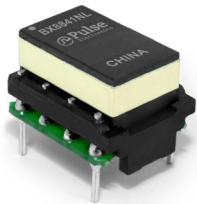
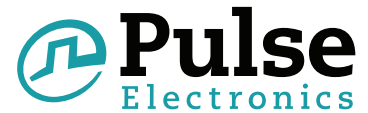


# XDSL SPLITTER FILTER MODULE

BX8841NL - SmartER series - Extended Temperature

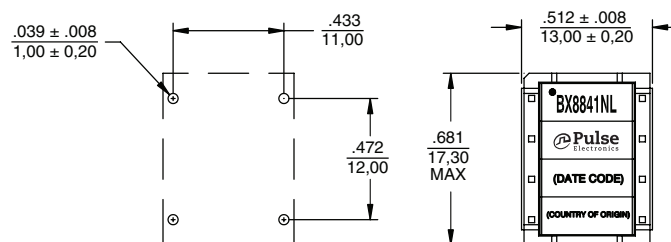


- POTS CO splitter for ETSI-B 600Ω ADSL to VDSL2 applications
- POTS CO splitter for China YD/T 1187-2006 ADSL2+ 600Ω
- LPF matched to 600Ω impedance
- Metering Pulse 12 kHz to 16 kHz
- Part of a standard series which has footprint compatibility
- Compliant with Broadband Forum TR-127 standard for VDSL2 applications
- Patented technology US7598837, US7598839, CN1667763, EP1644943, TWI316724, CA2531599

| Electrical Specifications @ 25°C Operational Temperature -40°C to +85°C |                                       |                          |
|-------------------------------------------------------------------------|---------------------------------------|--------------------------|
| PARAMETER                                                               | FREQUENCY                             |                          |
| POTS Impedance                                                          | 200 Hz to 4 kHz                       | 600 Ω                    |
| POTS Insertion Loss                                                     | @ 1 kHz                               | 0.3 dB MAX               |
| POTS Insertion Loss Distortion                                          | 200 Hz to 4 kHz                       | 0.3 dB MAX               |
| POTS Return Loss                                                        | 300 Hz to 500 Hz / 2.0 kHz to 3.4 kHz | 14 dB MIN                |
|                                                                         | 500 Hz to 2.0 kHz                     | 18 dB MIN                |
| Metering Pulse insertion loss                                           | 12KHz and 16KHz                       | 3dB MAX                  |
| Group Delay                                                             | 200 Hz to 3.4 kHz                     | 150uS MAX (Typical 65uS) |
| Longitudinal Balance                                                    | 50 Hz to 600 Hz / 3.4 kHz to 30 kHz   | 40 dB MIN                |
|                                                                         | 600 Hz to 3.4 kHz / 30 kHz to 1.1 MHz | 46 dB MIN                |
|                                                                         | 1.1 MHz to 30 MHz                     | 30 dB MIN                |
| xDSL Isolation                                                          | 30 kHz to 30 MHz                      | 55 dB MIN                |
| xDSL Insertion Loss                                                     | 32 kHz to 50 kHz                      | 3.0 dB MAX               |
|                                                                         | 50 kHz to 30 MHz                      | 1.0 dB MAX               |
| Intermodulation Distortion Attenuation                                  | Second order / Third order            | 57 dB MIN / 60 dB MIN    |
| Tip to Ring Capacitance                                                 |                                       | 20 nF MIN 115 nF MAX     |
| Tip to Ring Insulation Resistance                                       | (measured with 250V DC)               | 5 MΩ MIN                 |
| DC Current                                                              |                                       | 100 mA MAX               |
| Total DC Resistance                                                     |                                       | 25 Ω MAX                 |

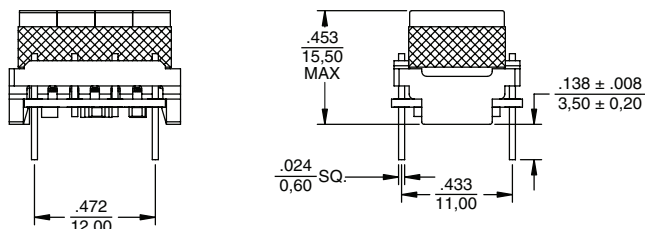
## Mechanical

### BX8841NL



SUGGESTED BOARD LAYOUT

Weight ..... 5.5 grams  
 Tray ..... .80/tray  
 Dimensions: Inches  
 mm  
 Unless otherwise specified, all  
 tolerances are ± .010  
 0.25



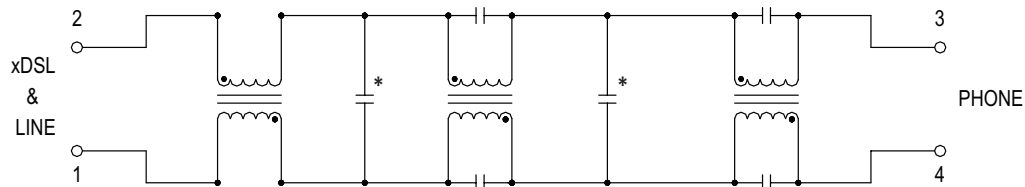
# XDSL SPLITTER FILTER MODULE

BX8841NL - SmartER series - Extended Temperature



## Schematic

**BX8841NL**



\* These capacitors are 500Vdc rated

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