



**THE DATASHEET OF  
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# XDSL SPLITTER FILTER MODULE

## B8859NL

SmartER series



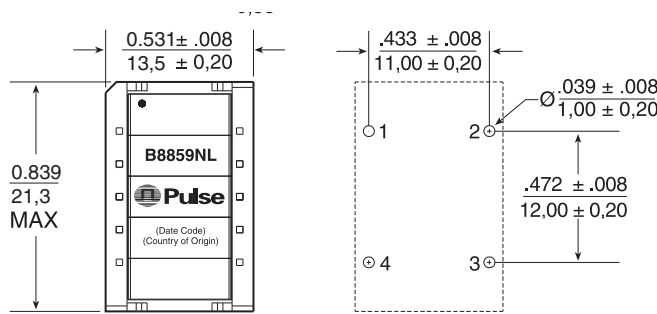
-  POTS CO splitter for standard ADSL / VDSL2 applications
-  LPF compliant with ETSI complex impedance ( $Z_L = 270 \Omega + 750 \Omega/150 \text{ nF}$ ), and option A of ETSI specification TS 101-952-1 v1.1.1, and with the optional requirement, relative to metering pulse at 12 kHz (Clause 6.7)
-  Part of a standard series which has footprint compatibility
-  For ADSL, ADSL2+, VDSL and VDSL2 applications
-  Compliant with Broadband Forum TR-127 standard for VDSL2 applications
-  Patented technology US7598837, US7598839, CN1667763, EP1644943, TWI316724, CA2531599

### Electrical Specifications @ 25°C

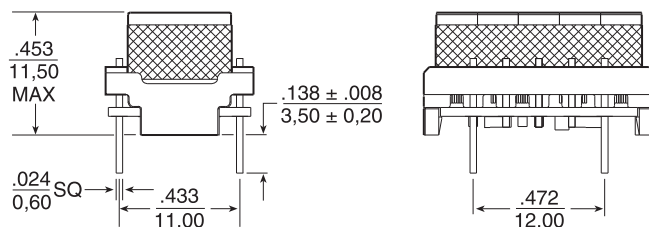
PARAMETER	FREQUENCY	
POTS Impedance	100 Hz to 4 kHz	$270 \Omega + 750 \Omega / 150 \text{ nF}$
POTS Insertion Loss	1 kHz	1 dB MAX
POTS Insertion Loss Distortion relative to 1 kHz	200 Hz to 4 kHz	1 dB MAX
POTS Return Loss	200 Hz to 3.4k Hz	12 dB MIN
	3.4k Hz to 4 kHz	8 dB MIN
POTS Group Delay	200 Hz to 4 kHz	200 $\mu\text{s}$ MAX
Longitudinal Balance	50 Hz to 600 Hz	40 dB MIN
	600 Hz to 3.4 kHz	46 dB MIN
	3.4 kHz to 4 kHz	40 dB MIN
xDSL Insertion Loss	32 kHz to 30 MHz	55 dB MIN
DC Current		80 mA MAX
Metering Pulse	12 kHz	3 dB MAX
Total DC Resistance		50 $\Omega$ MAX

### Mechanical

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SUGGESTED BOARD LAYOUT



Weight . . . . . 5.0 grams  
 Tray . . . . . .80/tray  
 Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$

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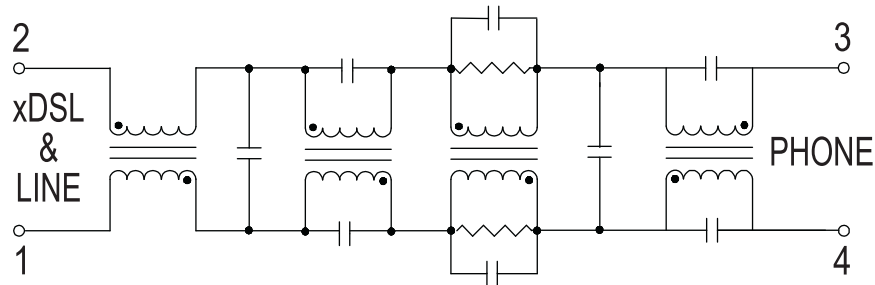


# Pulse

A TECHNITROL COMPANY

### Schematic

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