ADSL POTS CPE Splitter

BX8296NL   **Smart Series**

Pulse Electronics

- *POTS CPE Splitter Filter Module for standard ADSL and ADSL2+ VOIP applications*
- *Complies with ANSI TI.421 standard for applications in North America*
- *Footprint is compatible with a range of Pulse Splitter Filter Modules*
- *RoHS-6 compliant*

Electrical Specifications @ 25°C	
DC Characteristics	
Network port at 20mA	≤ 25Ω
Tip and Ring to Ground at ≤ 100dc / ≥ 100Vc and ≤200Vdc	>10MΩ / >30kΩ
Operating Current	5 to 90mA
Operating Voltages	
Network tip to ring	0 to -80Vdc
Network tip to ring level with ringing signal of 17 to 23Hz and 40 to 106Vrms	-20 to -80Vdc
On-hook Voice Band Insertion Loss	
Single filter / With 5 filters	-0.5dB to 1.5dB / -1.0dB to 6.5dB
On-hook Voice Band Insertion Loss Distortion	
Single filter, 200 to 1000Hz / With 5 filters	-1.5dB to 1.5dB / -5.5dB to 2.0dB
Single filter, 1 to 2.8kHz / With 5 filters	-1.5dB to 1.5dB / -2.0dB to 2.0dB
On - or Off - hook Envelope Delay 300Hz – 2800Hz	<250µs
Off-hook Voice Band Insertion Loss	
Single filter / With 5 filters	-0.5dB to 1.5dB / -1.0dB to 6.5dB
Off-hook Voice Band Insertion Loss Distortion	
Single filter, 200 to 3400Hz / With 5 filters	-1.0dB to 0.5dB / -1.5dB to 2.5dB
Single filter, 3.4 o 4kHz / With 5 filters	-1.5dB to 1.0dB / -2.0dB to 3.25dB
Off-hook impedance distortion	
Phone Port: SRL Low / ERL / SRL High	> 13dB / > 9dB / >3dB
Network Port: SRL Low / ERL / SRL High	> 12dB / > 10dB / >5dB
Inter-Modulation Distortion Second and Third order products	> 60dB
On-hook High Band Stopband Attenuation	
From 25 to 50kHz and from 50kHz to 12MHz, between 20 and 90mA	> 12dB
Off-hook High Band Stopband Attenuation	
From 25 to 50kHz, between 20 and 90mA / between 7 and 20mA	> 21dB / > 13dB
From 50 to 12kHz, between 20 and 90mA / between 7 and 20mA	> 25dB / > 22dB
Bridging Loss	
Single filter, 25 kHz to 1.2MHz / With 5 filters	< 0.5dB / < 1.25dB
Single filter, 25 kHz to 1.2MHz / With 5 filters	< 3.0dB / < 4.0dB

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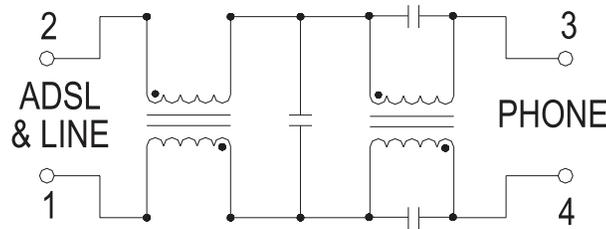
Mechanical

BX8296NL

$\frac{2.016}{51,20}$ MAX

$\frac{.638}{16,20}$ MAX

Pulse Electronics
BX8296NL
US Patent Number D485536
(Date Code)   (Country of Origin)

$\frac{.033}{0,85}$

$\frac{1.760}{44,70}$

$\frac{1.760}{44,70}$

4 X Ø $\frac{.049}{1,25}$

$\frac{.394}{10,00}$

SUGGESTED BOARD LAYOUT

$\frac{.472}{12,00}$ MAX

$\frac{.394 \pm .008}{10,00 \pm 0,20}$

$\frac{.138 \pm .020}{3,50 \pm 0,50}$
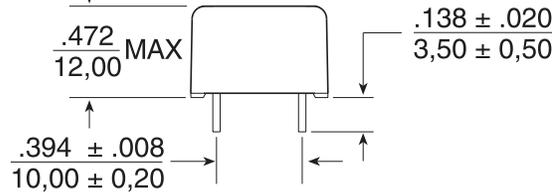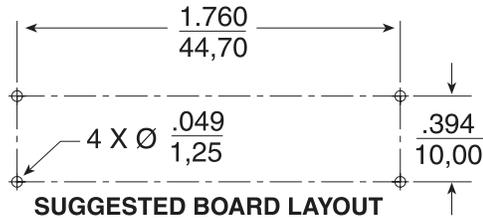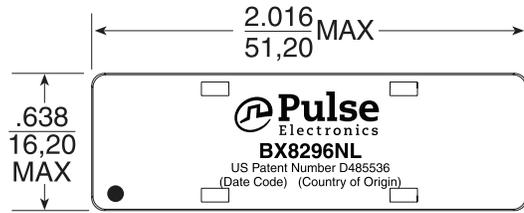
Weight ....15 grams
Tray 35/tray

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

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

Schematic

2
ADSL & LINE
1

3
PHONE
4

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