

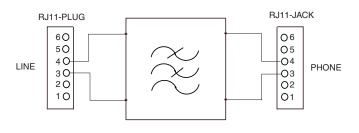
## Z-BLOCKER® Z-230PJ xDSL over POTS In-Line Filter

### Description

The Z-230PJ is a small in-line filter designed to expedite the service delivery and improve the performance of digital subscriber line (DSL) and home phoneline network (HPN) services. This model fits all telephone sets, facsimile machines, answering machines, etc. individually or in groups on line 1 only. Our in-line DSL filter design electronically isolates the high-speed DSL and HPN data streams from the voice band plain old telephone service (POTS) equipment. This design effectively blocks the DSL, and HPN up to 30 Megahertz.

#### Features

- Isolates telephone equipment impedances from the xDSL and HPN systems
- Attenuate xDSL & HPN signals to phone equipment to prevent conversion to voice band signals
- Attenuate HPN signals to unbalanced phone equipment to prevent radiation into electronic equipment
- Minimize voice band interference transmission, signaling and supervision
- Compatible with all major xDSL standards
- RoHS Compliant
- Compliant and listed with UL 60950, FCC Part 68
- CE certified



Z-230PJ Block Schematic



Z-230PJ In-Line xDSL over POTS Filter

## Applications

The Z-230PJ filters are used with other Z-BLOCKER® filters distributed throughout the subscribers' premises to isolate all voice band equipment devices such as corded/cordless telephones, answering machines, fax machines, 56Kb/s and lower rate modems, automatic dialers, recorder connectors and satellite television set-top boxes.

The Z-230PJ in-line DSL filter is one of many filters manufactured by Excelsus for subscriber installed digital services within homes, offices, and hotels. Excelsus is the number one selling brand of DSL filters worldwide.



# Z-BLOCKER® Z-230PJ xDSL over POTS In-Line Filter

Line side differential inpu	t blocking impedance	
At 20 kHz		>2k
At 30 kHz		>3k
From 5 MHz to 10 MHz		>2k
1 kHz insertion loss betwe	een 600 $\Omega$ resistive	
Single filter		<0.4
With 5 filters		<0.6
1 kHz/2.8 kHz slope betw	een 600 $\Omega$ resistive	
Single filter		<0.1
With 5 filters		<1.1
DC resistance in Ohms		
Tip to Tip, and Ring to Ring		<12
Tip to Ring		>10M
Longitudinal Balance per	IEEE method	
From 200 - 1 kHz		>58 dB
From 1 kHz - 3 kHz		>53 dB
Common mode rejection at 40 kHz and 30 MHz		>45dB
Low pass roll off (slope) between 600 Ohm and ADSL Transmission Unit - Remote		>26dB
Inter-Modulation Distortion First and Second order products		>60dB
Envelope Delay 300 Hz - 2800 Hz		<100µs
600Ω Return Loss into ph	one side with $600\Omega$ line termination with ATU-R	
Single filter	SRL Low	>30dB
	ERL	>14dB
	SRL High	>17dB
+2 bridged filter	SRL Low	>36dB
	ERL	>23dB
	SRL High	>13dB
+4 bridged filter	SRL Low	>26dB
	ERL	>15dB
	SRL High	>8dB
Complex* Return Loss wi	th ATU-R	
Single filter	SRL Low	>27dB
Single filter	ERL	>14dB
Single filter	SRL High	>6dB
+2 bridged filters	SRL Low	>19dB
	ERL	>14dB
	SRL High	>3dB
+4 bridged filters	SRL Low	>15dB
	ERL	>7dB
	SRL High	>2dB

DC Loop Current - Meets specifications between 20 and 100 milliamps DC

Connectors: RJ-11 Jack and RJ-11 Plug

RJ11 pins have ≥50 micro-inches of gold plating over ≥100 micro-inches of nickel plating

Dimensions: Length 2.12in (54mm), Width 1.21in (30.85mm), Height 0.72in (18.34mm), Cable Length = 3.78in (96mm)

 $\pm$  1.0 mm on outline dimension.  $\pm$ 10.0 mm on length of cable

Compliant and listed with UL / CSA 60950, FCC CFR 47 Part 68



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