Description

The Z-200SM 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 filters all telephone sets, facsimile machines, answering machines, etc individually or in groups. Our in-line filter design electronically isolates the high-speed DSL and HPN data streams from the voice band plain old telephone service (POTS). This design effectively blocks the DSL, HPN and other radio frequencies up to 400 Megahertz (MHz).

Z-200SM In-Line Filter

Features

● Isolate 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

● Attenuate radio signals picked up by unbalanced telephone acting as an antenna from effecting DSL or HPN receivers

● Minimize voice band interference --- transmission, signaling and supervision

● Compatible with all major xDSL standards including ADSL Full Rate (ITU-T G.992.1), ADSL G.Lite (ITU-T G.992.2), ADSL2 (ITU-T G.992.3 and .4), ADSL2+ (ITU-T G.992.5 in analog mode), ADSL2++, VDSL (ITU-T G.993.1), VDSL2; also V.90 and Metallic Loop Testing compatible

● FCC 47 CFR Part 68, IC CS-03, UL 60950, and CSA 22.2 No. 60950 compliant and listed

● CE Mark certified

● RoHS and WEEE compliant

Applications

The Z-200SM 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-200SM 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.

Series 200 Z-BLOCKER® Filter Specifications

Line side differential input blocking impedance		
At 20 kHz		>2k
At 30 kHz		>3k
From 5 MHz to 10 MHz		>4k
From 10 MHz to 400 MHz		>2k
1 kHz insertion loss between 600 Ohm resistive		
Single filter		<0.7
With 5 filters		<0.8
1 kHz/2.8 kHz slope between 600 Ohm resistive		
Single filter		<0.1
With 5 filters		<0.8
DC resistance in Ohms		
Tip to Tip, and Ring to Ring		<50
Tip to Ring		>10M
Longitudinal Balance per IEEE method		
From 200 - 1 kHz		>58dB
From 1 kHz - 3 kHz		>53dB
Common mode rejection at 40 kHz and 1.1 MHz		>45dB
Low pass roll off (slope) between 600 Ohm and ADSL Transmission Unit - Remote		>24dB
Inter-Modulation Distortion First and Second order products		>60dB
Envelope Delay 300 Hz - 2800 Hz		$<100\mu s$
600 Ohm Return Loss into phone side with 600 Ohm line termination with ATU-R		
Single filter	SRL Low	>25dB
	ERL	>25dB
	SRL High	>24dB
+2 bridged filters	SRL Low	>29dB
	ERL	>22dB
	SRL High	>15dB
+4 bridged filters	SRL Low	>28dB
	ERL	>16dB
	SRL High	>9dB
Complex* Return Loss with ATU-R		
Single filter	SRL Low	>28dB
Single filter	ERL	>17dB
Single filter	SRL High	>9dB
+ 2 bridged filters	SRL Low	>20dB
	ERL	>11dB
	SRL High	>6dB
+ 4 bridged filters	SRL Low	>16dB
	ERL	>8dB
	SRL High	>4dB
* 1330 Ohms in parallel with (100nfd in series with 348 Ohms)		
DC Loop Current – Meets specifications between 20 and 100 milliamps DC		
Isolates dial pulses and on-hook/off-hook transitions from the digital subscriber line		
Dimensions: Length 2.0in (50.8mm), Width 1.25in (31.75mm), Height .75in (19.05mm), Cord Length = 3.5in (88.9mm)		
US Pat. No. 6,212,259 and Taiwan Pat. No. 152847		