

## Description

The Z-400UK is a BT SIN498 VDSL2 customer premises equipment filter designed to expedite the service delivery and improve the performance of DSL services over plain old telephone service (POTS) in the United Kingdom. The Z-400UK filters all telephones, and other telephone equipment. Its filter design electronically isolates the high-speed DSL data stream from the voice-band equipment to provide premium voice quality and optimal DSL data rates.

## Features

- Compliant to BT SIN498 VDSL2 Standard
- Provides a DSL convenience jack for connecting a DSL modem or HPN device
- Compliant to ETSI 952-3 Option B Standard
- CE certified
- RoHS and WEEE compliant

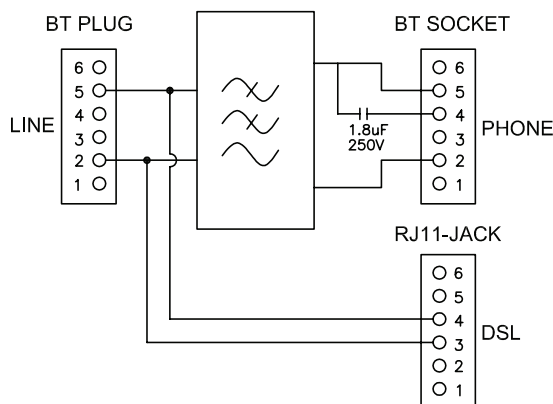


*Z-400UK filter provides a DSL convenience jack for connecting a DSL modem*

## Applications

The DSL user installs the Z-400UK filter into every telephone jack in the subscribers' premises that contains voice-band equipment devices such as cordless telephones, answering machines, fax machines and television set-top boxes.

The Z-400UK is one of many filters and splitters manufactured by Pulse for subscriber-installed digital services within homes, offices, and hotels.



*Z-400UK Block Schematic – includes a BT specified "Ringing Capacitor"*

### Z-400UK Electrical Specifications

Matching BT impedance for voice terminals		150nF // 750Ω + 270Ω
POTS Pass Band Return Loss		
Line and Phone port with 1 filter	0.3 - 0.5kHz	14dB Min
	0.5 - 2.0kHz	18dB Min
	2.0 - 3.4kHz	14dB Min
Line port with 2 filter	0.3 - 0.5kHz	14dB Min
	0.5kHz	18dB Min
	0.5 - 2.0kHz	16dB Min
Line port with 3 filter	2.0 - 3.4kHz	12dB Min
	0.3 - 0.5kHz	14dB Min
	0.5 kHz	18dB Min
Line port with 3 filter	0.5 - 2.0kHz	14dB Min
	2.0 - 3.4kHz	10dB Min
	Off-Hook Insertion Loss: Maximum IL and IL Variation	
200Hz < f < 4kHz, with 1 filter		2.0dB Max
200Hz < f < 4kHz, with 2 filter		2.5dB Max
200Hz < f < 4kHz, with 3 filter		3.0dB Max
On-Hook Insertion Loss with high impedance: Maximum IL and IL Variation		
200Hz < f < 2.8kHz, with 1~3 filter		4.0dB Max
On-Hook Insertion Loss with low impedance: Maximum IL and IL Variation		
200Hz < f < 2.8kHz, with 1 filter		2.0dB Max
Unbalance About Earth (terminated with 600Ω)		
50Hz to 600Hz		40dB Min
600Hz to 3400Hz		46dB Min
3400Hz to 4000Hz		40dB Min
Longitudinal Balance (25kHz to 1.1MHz)		40dB Min
Off-Hook ADSL Stop Band Isolation (Insertion Loss) w/100Ω at Line/Phone		
32kHz to 200kHz		30dB Min
200kHz to 30MHz		55dB Min
DSL Signal Loss	32kHz to 50kHz	3.0dB Max
	50kHz to 30MHz	1.0dB Max
Group Delay	0.2 - 0.6kHz	250us Max
	0.6 - 3.2kHz	200us Max
	3.2 - 4.0kHz	250us Max
DC Resistance		50Ω Max
Isolation impedance		5MΩ Min
Ringing voltage drop at 25Hz and 50Hz		< 2VRMS(source e.m.f. 35 VRMS)
DC Feeding Current (Loop Current)		< 80 mA
AC ringing voltage (25-50Hz)		< 100 Vrms
Connectors: UK plug (Line); RJ11 Jack (DSL); UK socket (Phone)		

### Mechanical Specifications

