



MDF Splitter for 600 ohm impedance  
P/N: DL0002



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## Product Specification

Product Number: DL0002

Product Design History:

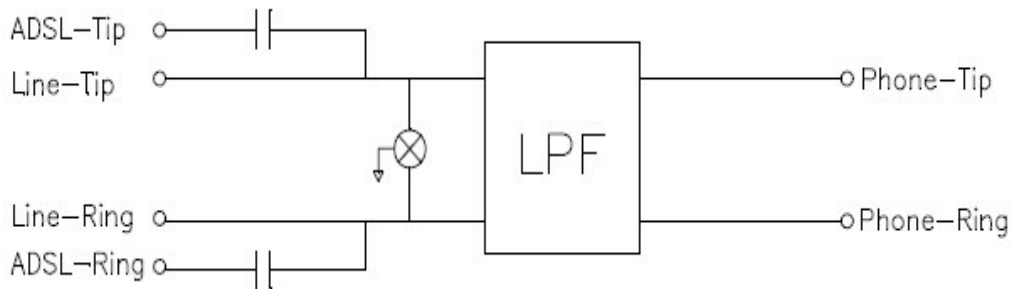
Revision	Designer	Description	Date
A01	John Chen	New Released	10/12,'08

## 1. Introduction

This is a ADSL splitter which designed to implement the functionality of low pass filter for ADSL over POTS application for MDF package.

## 2. Electrical Specification

### 2-1 Schematic



### 2-2 Electrical

General Electrical		
Item	Range	Value
Splitter Bandwidth		DC to 16KHz
Nominal Voice Band		0.3KHz to 3.4KHz
Billing Tone		12KHz±80Hz
Ringing Frequency		15.3Hz to 68Hz
ADSL Band		30KHz to 2208KHz
Line Impedance ( $Z_L$ )		600ohm
Co Impedance ( $Z_{TC}$ )		600ohm
RT Impedance ( $Z_{Tr}$ )		600ohm
Modem Impedance	$30KHz < f < 2208KHz$	100ohm



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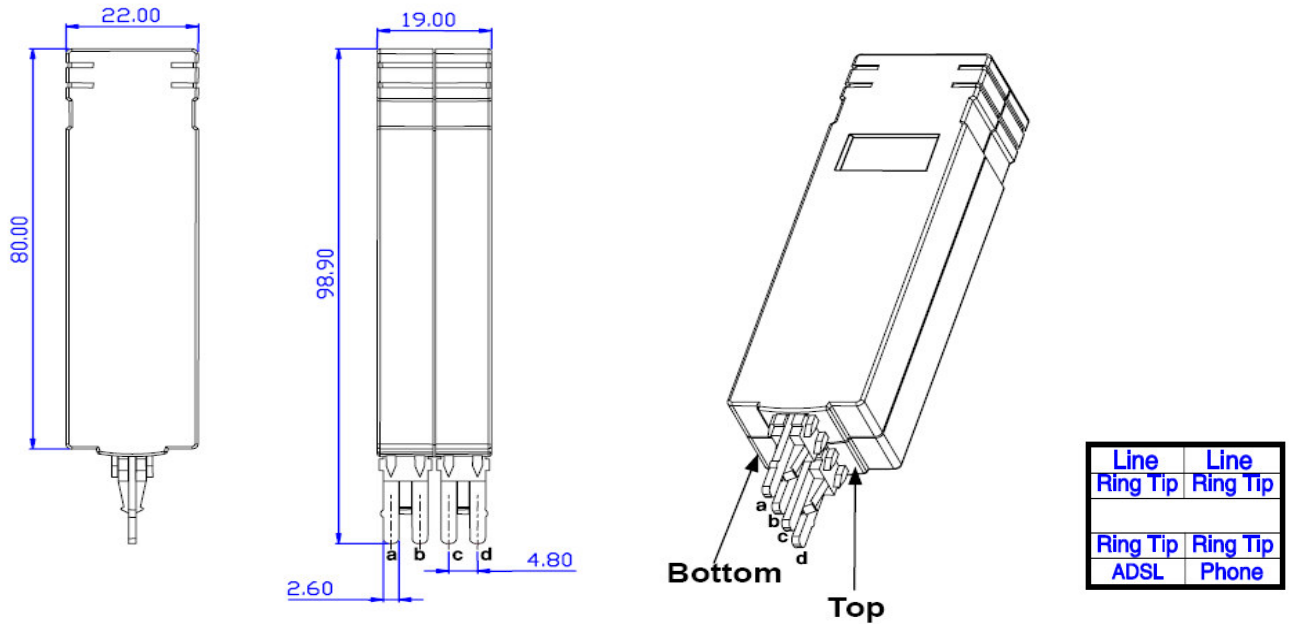


P/N: DL0002

Voice Band Electrical		
Item	Range	Value
Nominal Signal		21mVpp to 5.4Vpp
Billing Ton		10Vpp to 30.2Vpp
Ringing Signal		113Vpp to 424Vpp
DC Voltage		0V to 105V
AC Voltage max.		150Vrms / 105Vdc offset
Differential max.		320V
Loop Current		< 100mA
Transient Current	400msec.	< 150mA
DC Resistance		
DC Resistance		≤ 25ohm
Isolation Tip/Ring		> 5Mohm
Insertion Loss	1004Hz	< 0.3dB
Attenuation Distortion	200Hz < f < 3.4KHz	< ±0.6dB
	3.4Hz < f < 4KHz	< 1.0dB
Delay Distortion	200Hz < f < 4KHz	< 100usec.
Return Loss	200Hz < f < 500Hz	≥ 14dB
	500Hz < f < 2KHz	≥ 18dB
	2KHz < f < 3.4KHz	≥ 14dB
LCL	200Hz to 3KHz	> 53dB
ADSL Band Electrical		
Item	Range	Value
Attenuation	30KHz < f < 2208KHz	> 65dB
Isolation		> 2000Vrms for 1minute

### 3. Mechanical (unit:mm)

4.



a Top	Line – Tip	a Bottom	Phone – Tip
b Top	Line – Ring	b Bottom	Phone – Ring
c Top	Line – Tip	c Bottom	ADSL – Tip
d Top	Line – Ring	d Bottom	ADSL – Ring



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## 5. Environmental

### 5-1 Over voltage and current

ITU-T Recommendation K.20 Electrical Safety requirements.

### 5-2 Operating temperature

- ◆ Operating temperature: -20 to + 60 degrees
- ◆ Storage temperature: -40 to + 80 degrees
- ◆ Humidity: 0 to 95% (non-condensing)

## 6. Reliability

- ◆ Thermal shock: -20 to +85 degrees for 5 cycles
- ◆ Humidity exposure: +50 degrees/95RH, 96hrs
- ◆ Vibration: X axis/10mins, Y axis/10mins