A.C.E. 泰華達股份有限公司
ArchiCore Electronics CO., LTD

RoHS 2002/95/EC

Product Specification

Product name	**CPPCA003**
Product Type	**Customer premise Splitter**
System Application	**VDSL Over POTS**
Author	**Alvin Liou**
Approved By	**Sundi Lin**

泰華達股份有限公司

Archicore Electronics CO., LTD

地址：高雄市前鎮區新衙路 288-6 號 7F-1(運通大樓 C 棟)

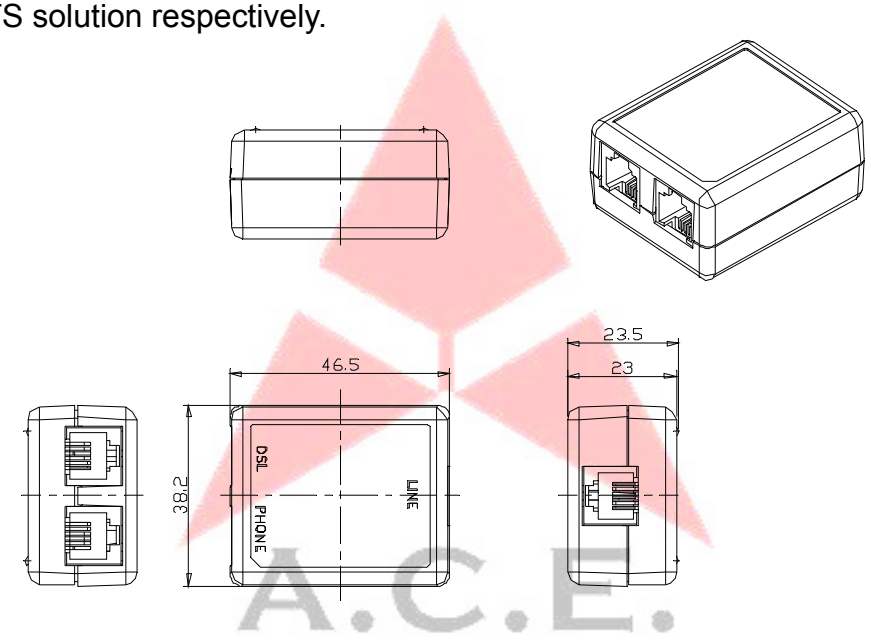
Address: 7F-1, No. 288-6, Xinya 1 Rd., Chianjen District,

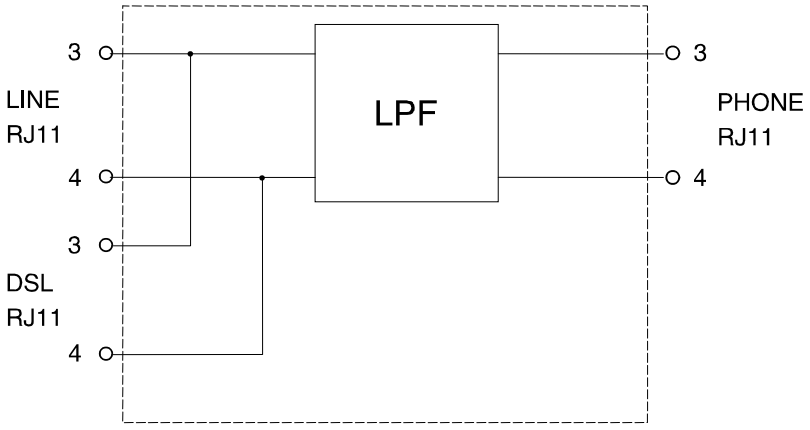
Kaohsiung City, 806, Taiwan

Tel: +886-7-970-3268 FAX: +886-7-841-1851

The CPPCA003 is a customer premise splitter that has been specifically designed to implement the functionality of low pass filter in POTS over VDSL application. The CPPCA003 integrate low pass filter that block the high frequency energy from reaching the POTS device and provide isolation from impedance effects of the POTS device on VDSL. Because the splitter connects directly to the subscriber loop media, it must also provide some protection for externally induced line hits or faults which could damage any attached equipment or endanger humans interacting with the installed equipment.

The circuit protection will be provided mostly by standard central office line protection means and additional protection measures built into splitter to protect against line overstress which could damage the splitter itself. This splitter mainly consist of one low pass filter which provide POTS solution respectively.





Reference :

ETSI ETS 300 001	Attachments to Public Switched Telephone Network (PSTN); General technical requirements for equipment connected to an analogue subscriber interface in the PSTN
ITU G.992.x	Asymmetric Digital Subscriber Line (ADSL) Transceivers

Requirements :

Title		Conditions
DC resistance	<=25.0 ohm	Tip to Ring at the POTS interface with the U-R interface shorted.
Insertion loss ZTc=600, ZTr=600	< 0.3 dB < 0.3 dB	1 kHz 1020 Hz
Insertion loss distortion ZTc=600, ZTr=600	< ± 1.0 dB	0.2 to 4.0 kHz (relative to 1 kHz)
Return loss Zref=600 , Zterm=600 * Note: fRL = f (Hz) / 100	> 14 + 2 (fRL – 3) dB > 18 dB > 18 – 0.28 (fRL – 20) dB	300 Hz < f < 500 Hz 500 Hz < f < 2000 Hz 2000 Hz < f < 3400 Hz
Longitudinal balance	> 58dB	200 Hz < f < 3.4 kHz
Delay distortion **ZTc**=600, **ZTr**=600	< 200 us < 250 us	0.6 kHz to 3.2 kHz 0.2 kHz to 4.0 kHz
DSL band attenuation	> 55 dB > 65 dB > 55 dB	25 kHz to 30 kHz 30 kHz to 2208 kHz 2208 kHz to 30MHz
DSL band insertion loss as LPF loading effect	< 0.25 dB	25 kHz to 30 MHz
DSL band return loss as LPF loading effect	> 14 dB	25 kHz to 30MHz

Revision History:

Rev.	Author	Approved by	Description of change	Issued date
0	Alvin	Sundi	New release	2011/3/2
1	Alvin	Sundi	Modified Requirements : Longitudinal balance	2011/5/23