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**Electronic Volume Controller IC**

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**PT2253B**

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**DESCRIPTION**

PT2253B is an electronic volume controller IC utilizing CMOS Technology specially designed for use on audio equipment. It has two (2) built-in channels making it ideally suitable for mono and stereo sound applications. PT2253B provides a wide frequency response range and a very low harmonic distortion to mention a few; thereby guaranteeing a highly effective and reliable performance.

**FEATURES**

- ☐ CMOS Technology
- ☐ Low Power Consumption
- ☐ Operating Voltage Range :  $V_{CC} = 4 \sim 12\text{ V}$   
(Backup Voltage is up to 4 V)
- ☐ 0dB to -68dB attenuation controlled by 2dB/step
- ☐ 2 Channels in each chip
- ☐ Capable to control attenuation by a built-in oscillator and Up/Down Pin
- ☐ Single Power Supply or Dual Power Supplies of (+) and (-) can be used
- ☐ Wide Frequency Response Range
- ☐ Very Low Harmonic Distortion
- ☐ Available in 16 pins, DIP or SO Package

**APPLICATIONS**

- ☐ Audio Equipment Volume Control
- ☐ Traditional VR Replacement

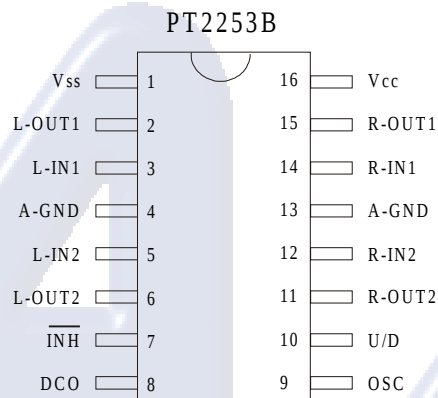

**Princeton Technology Corp.**

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URL: <http://www.princeton.com.tw>
**Electronic Volume Controller IC**
**PT2253B**

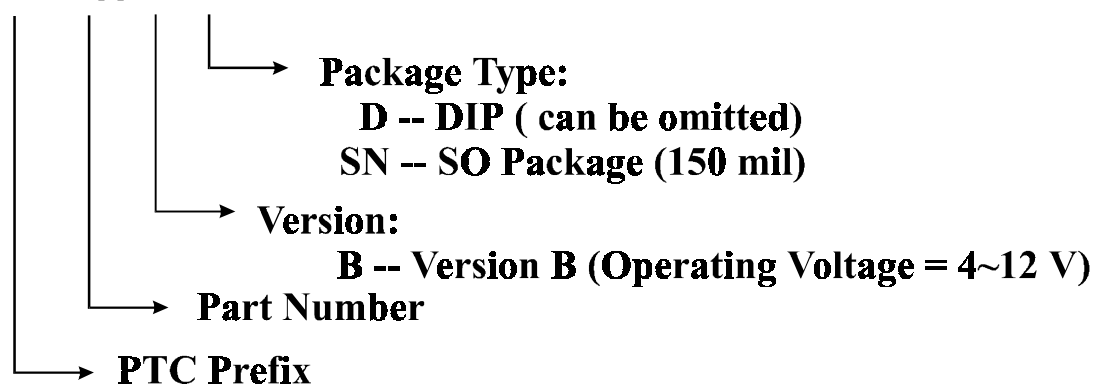
## PIN CONFIGURATION



## ORDER INFORMATION

| Valid Part Number | Package               |
|-------------------|-----------------------|
| PT2253B           | 16 Pins, DIP          |
| PT2253B-SN        | 16 Pins, SO (150 mil) |

### PT 2253 B- X



Note: PTC also offers PT2253A for an Operating Voltage Range = 6.0 ~12.0 V.

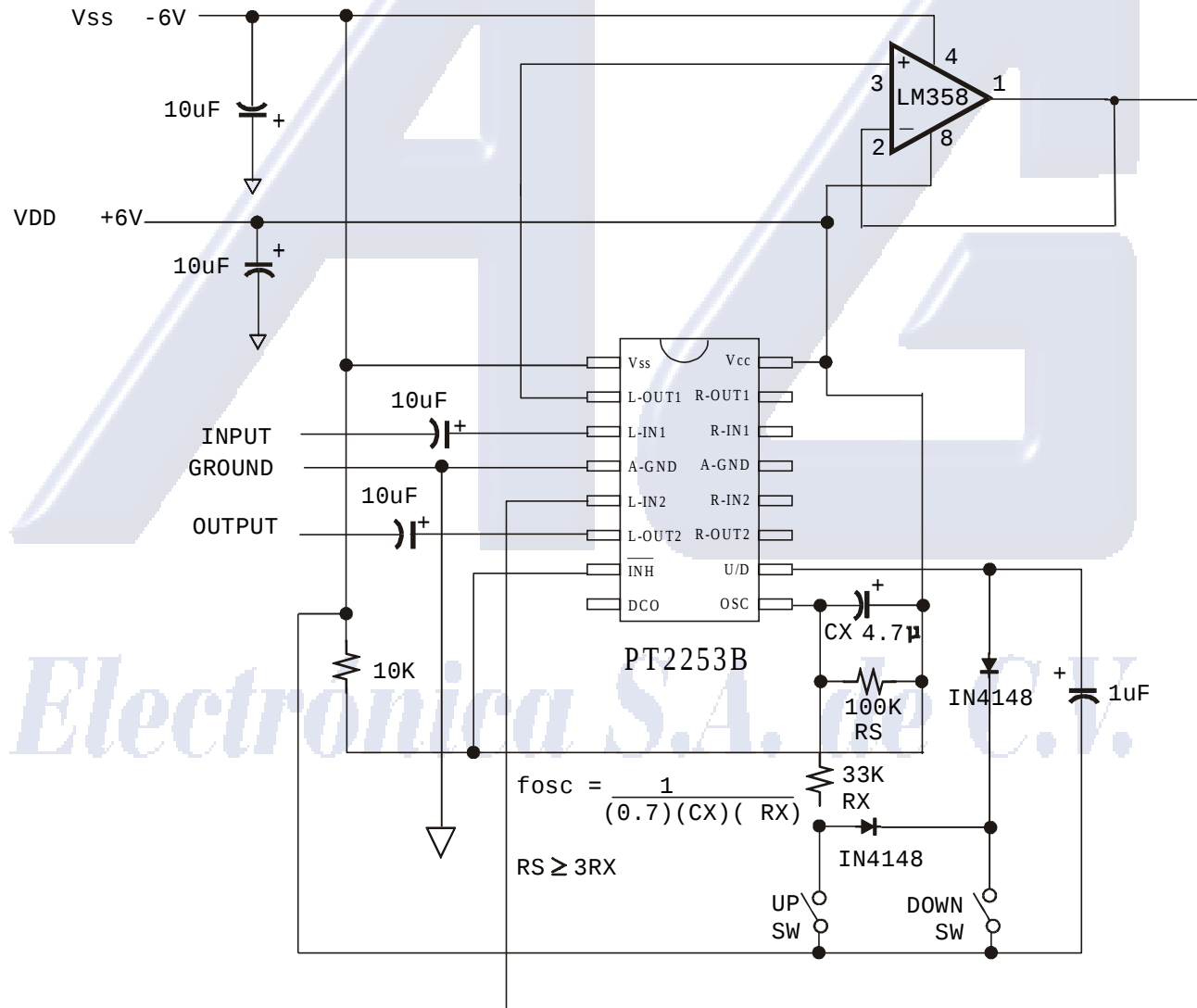


# Electronic Volume Controller IC

## PT2253B

## APPLICATION CIRCUIT 1

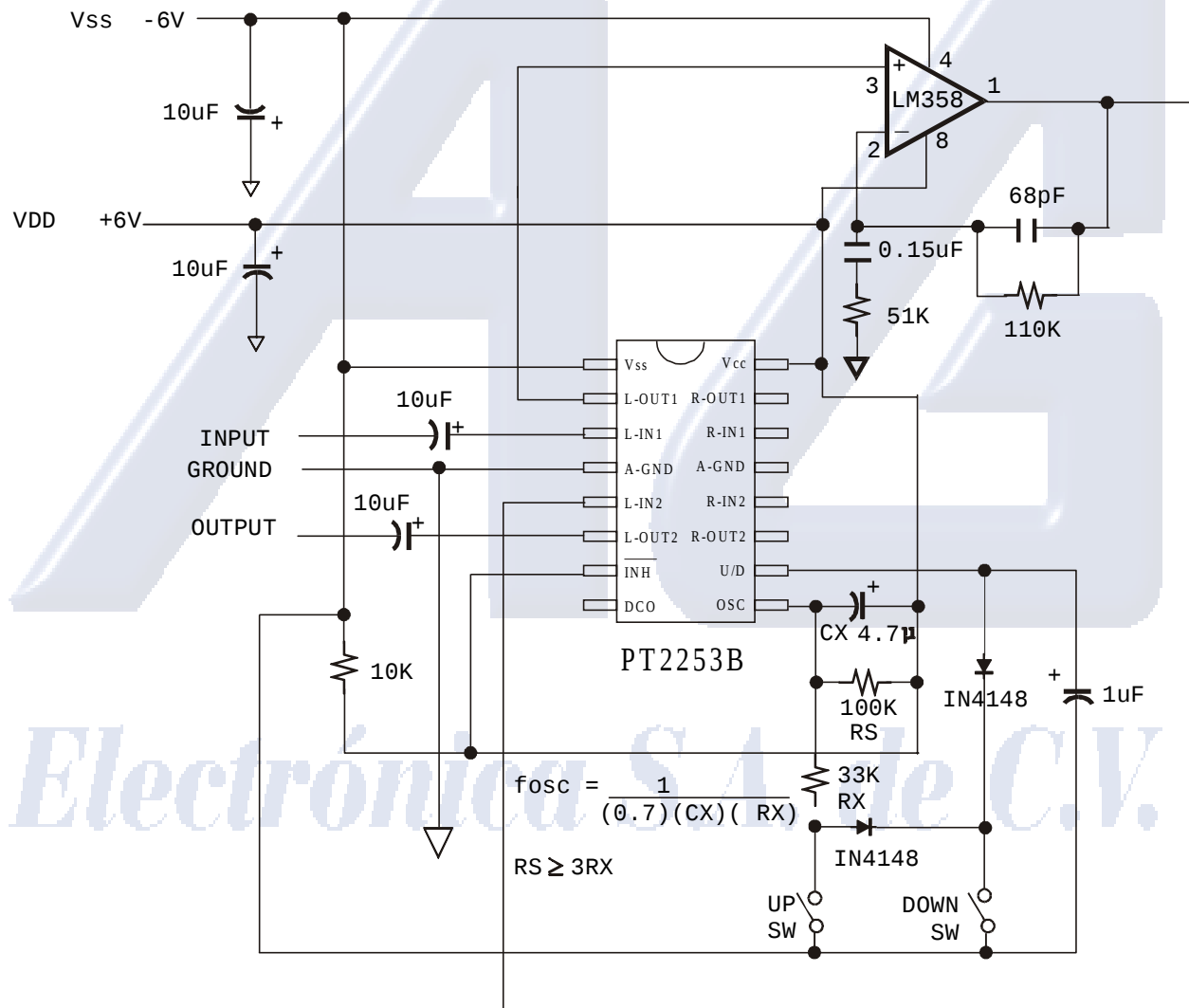
### ***Dual Power Supply (L-Channel Only)***





## APPLICATION CIRCUIT 2

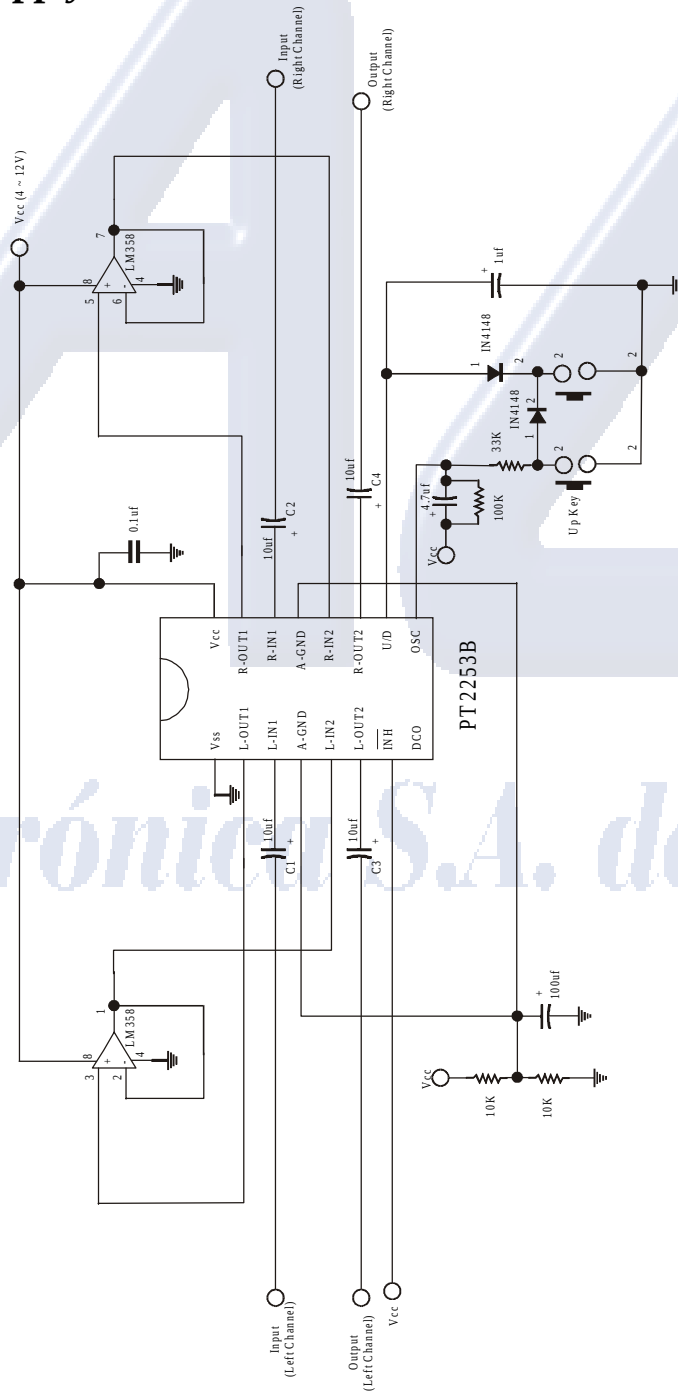
## Dual Power Supply (L-Channel Only)



Note: Since the Buffer Amp between Att-1 and Att-2 is already 10dB Voltage Gain, higher input level may cause OP Amp's Output Clipping. To avoid unwanted distortion, the input signal level applied at IN-1 should not be over 1 Vrms.



## APPLICATION CIRCUIT 3

*Single Power Supply*

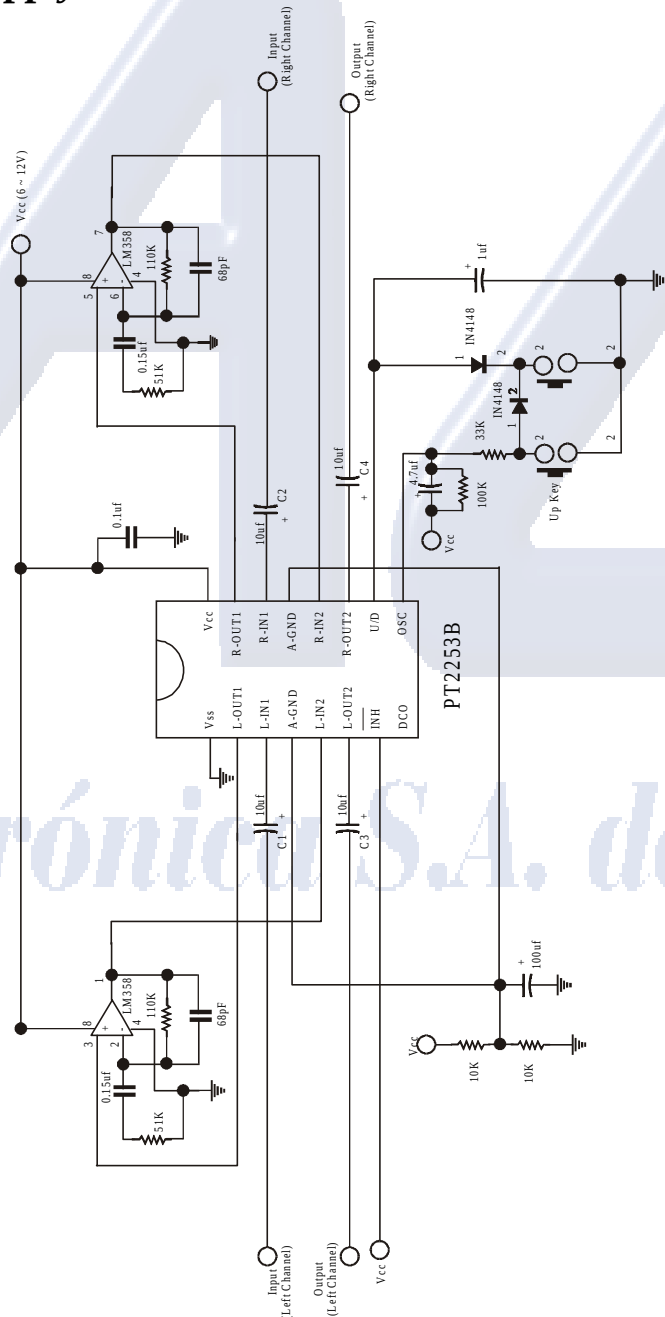


# Electronic Volume Controller IC

PT2253B

## APPLICATION CIRCUIT 4

## Single Power Supply



Note: Since the Buffer Amp between Att-1 and Att-2 is already 10dB Voltage Gain, higher input level may cause OP Amp's Output Clipping. To avoid unwanted distortion, the input signal level applied at IN-1 should not be over 1 Vrms.



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**AG**

*Electrónica S.A. de C.V.*