

DIO2102B

3-Vrms Audio Driver with Adjustable Gain

Features

- Voltage Output at 2.5kΩ Load
 - 2 Vrms With 3.3V Supply Voltage
 - 3 Vrms With 5V Supply Voltage
- Ultra Low Distortion
 - SNR>109dB
 - Typical Vn<7μVrms
 - THD+N<0.001%
- No Pop/Clicks Noise when Power ON/OFF
- No Need for Output DC-Blocking Capacitors
- Optimized Frequency Response between 20Hz–20kHz
- Accepting Differential Input
- Featuring external under voltage mute
- HBM ESD protection: Output pin 8kV and other pins 5kV
- Available in TSSOP-14 package

Applications

- Set-Top Boxes
- High Definition DVD Players
- Car Entertainment System
- Medical

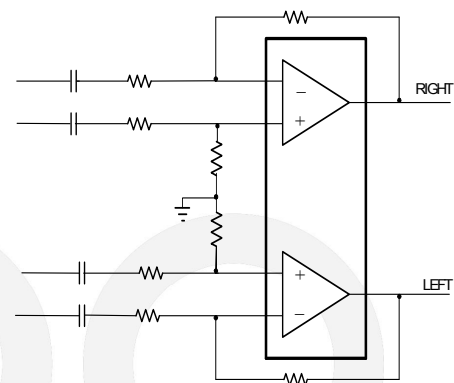
Descriptions

The DIO2102B is an integrated solution for Set-top box and high definition player, and designed to optimize the audio driver circuit performance while reducing the BOM cost by eliminating the peripheral discrete components for noise reduction. DIO2102B features a 3Vrms stereo audio driver that designed to allow for the removal of output AC- coupling capacitors.

Featuring differential input mode, gain range of ±1 V/V to ±10 V/V can be achieved via external gain resistor setting. The DIO2102B is able to offer 3Vrms output with 2.5k ohm load and 5V supply.

Meanwhile, the DIO2102B offers built-in shut-down control circuitry for optimal pop-free performance. Under under-voltage condition, DIO2102B is able to detect it and mutes the output.

Block Diagram

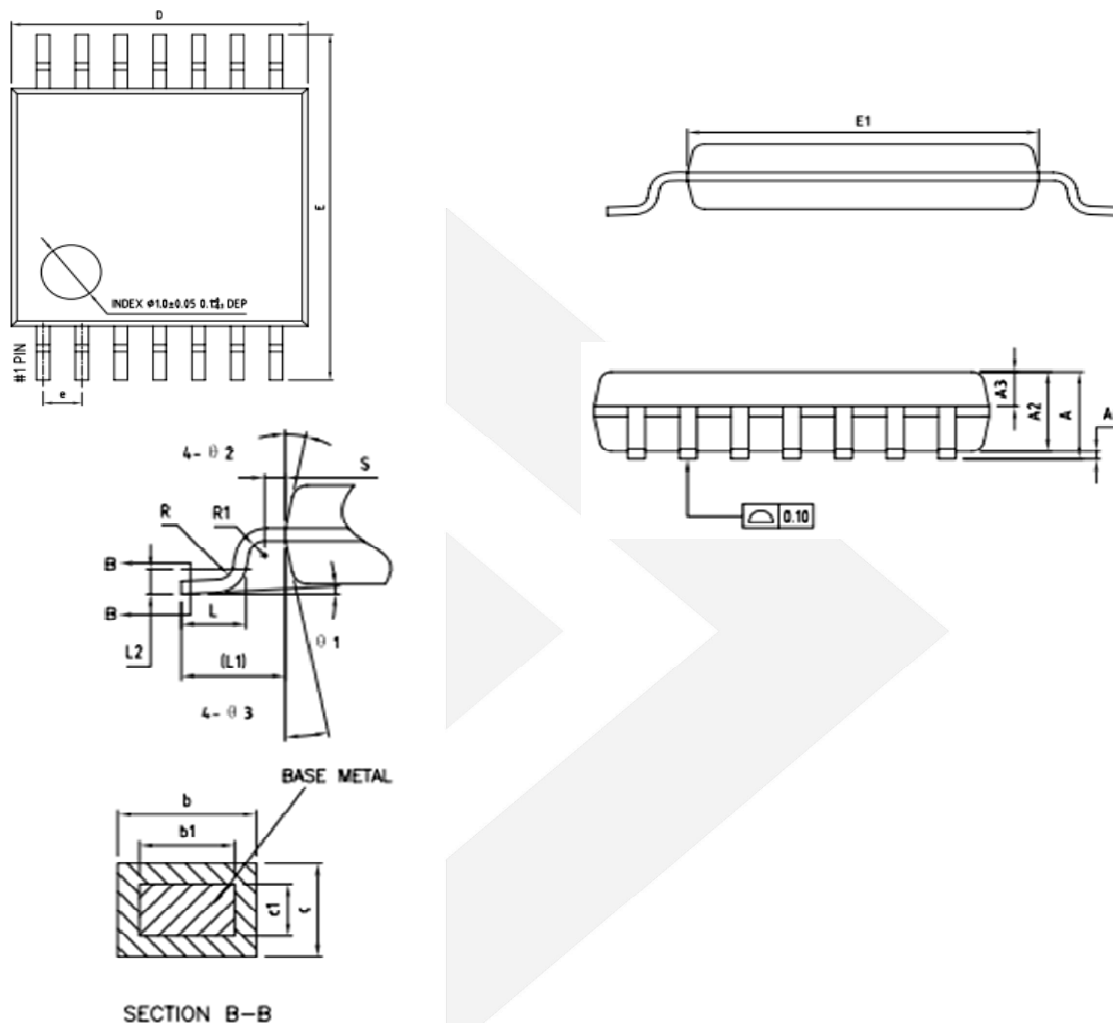


Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO2102BTP14.	DIO2102.	Green/RoHS	-40 to +85°C	TSSOP-14	Tape & Reel, 2500

DIO2102B

Physical Dimensions: TSSOP-14



SECTION B-B

Symbol	Dimensions In Millimeters		
	Min	Nom	Max
A	-	-	1.20
A1	0.05	-	0.15
A2	0.90	1.00	1.05
A3	0.34	0.44	0.54
b	0.20	-	0.28
b1	0.20	0.22	0.24
c	0.10	-	0.19
c1	0.10	0.13	0.15
D	4.86	4.96	5.06
E	6.20	6.40	6.60
E1	4.30	4.40	4.50
e	0.65BSC		
L	0.45	0.60	0.75
L1	1.00REF		
L2	0.25BSC		
R	0.09	-	-
R1	0.09	-	-
S	0.20	-	-
θ 1	0°	-	8°
θ 2	10°	12°	14°
θ 3	10°	12°	14°

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CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipments and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.

