

DIO2134

3-Vrms Audio Driver with Adjustable Gain

Features

- Voltage Output at 2.5kΩ Load:
3 Vrms With 5V Supply Voltage
- Ultra Low Distortion:
SNR=110dB
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 6kV
- Available in MSOP-10 package

Applications

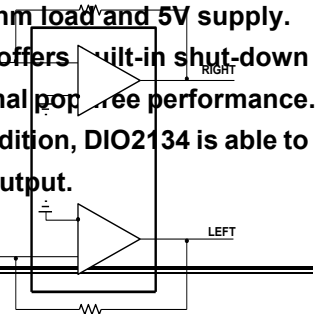
- Set-Top Boxes
- High Definition DVD Players
- Car Entertainment System
- Medical

Descriptions

The DIO2134 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. DIO2134 features a 3Vrms audio driver that designed to allow for the removal of output AC-coupling capacitors.

Featuring differential input mode, gain range of $\pm 1V/V$ to $\pm 10V/V$ can be achieved via external gain resistor setting. The DIO2134 is able to offer 3Vrms output with 2.5kohm load and 5V supply. Meanwhile, the DIO2134 offers built-in shut-down control circuitry for optimal pop-free performance. Under under-voltage condition, DIO2134 is able to detect it and mutes the output.

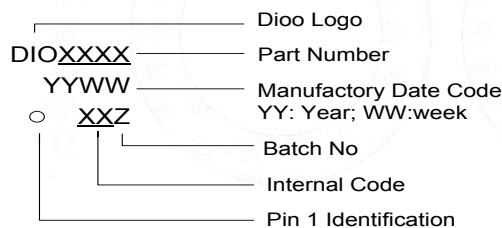
Block Diagram



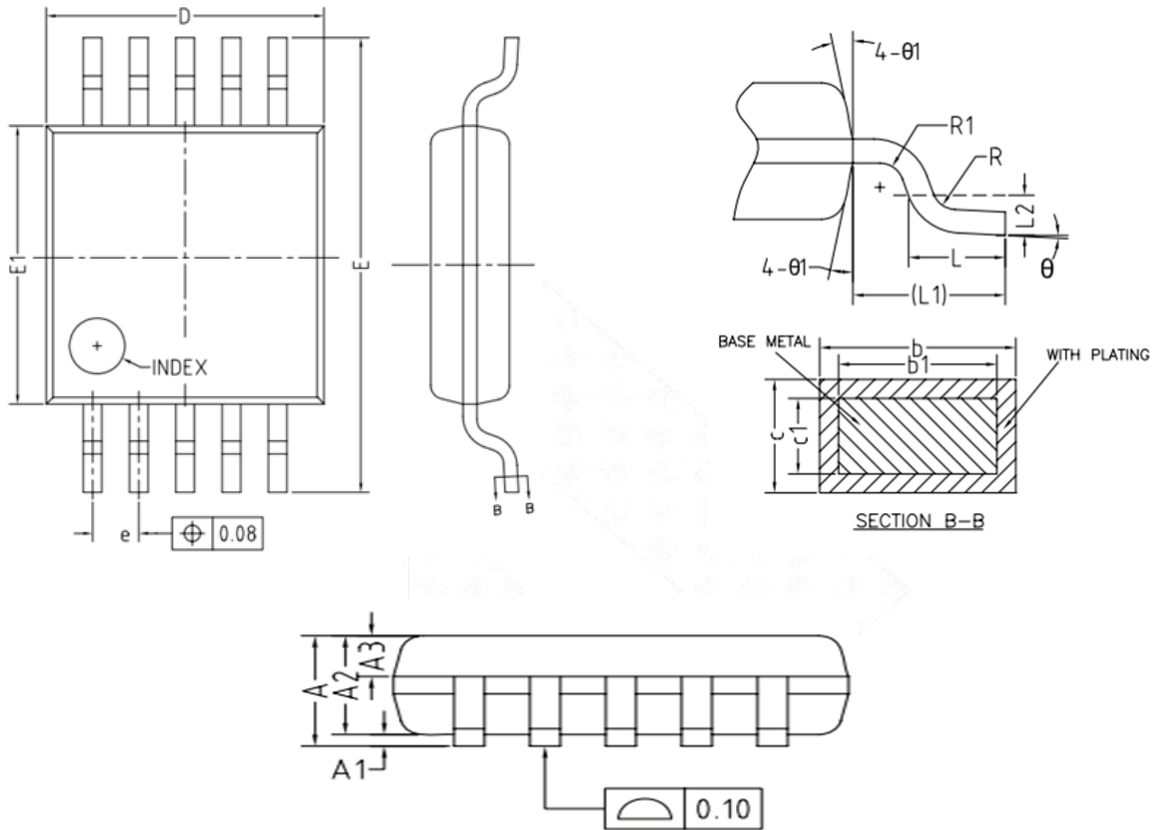
Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO2134CM10	DIO2134	Green/RoHS	-40 to +85°C	MSOP-10	Tape & Reel, 3000

Marking Definition



Physical Dimensions: MSOP-10



SYMBOL	MIN	NOM	MAX
A	-	-	1.10
A1	0	-	0.15
A2	0.75	0.85	0.95
A3	0.25	0.35	0.39
b	0.18	-	0.27
b1	0.17	0.20	0.23
c	0.15	-	0.20
c1	0.14	0.15	0.16
D	1.90	3.00	3.10
E	4.70	4.90	5.10
E1	2.90	3.00	3.10
e	0.40	0.50	0.60
L	0.40	0.60	0.80
L1	0.95REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
θ	0°	-	8°

θ_1

9°

12°

15°

