

**LA6534****2-Channel BTL-Use Driver****Overview**

The LA6534 is a 2-channel BTL-use driver designed for compact disc pickup actuation.

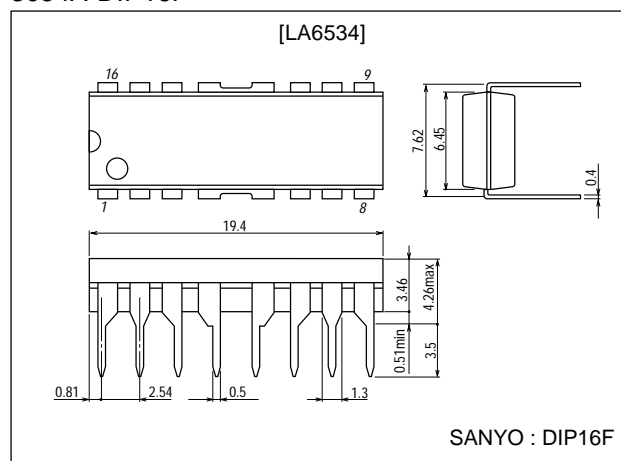
Functions and Features

- High output current ($I_O \text{ max}=0.5\text{A}$).
- Wide operating voltage range (4 to 15V).
- Low input bias current.
- High slew rate ($0.8\text{V}/\mu\text{s}$ typ).
- Output of amplifiers 1 to 4 and buffer amplifier at muting-ON mode : OFF.

Package Dimensions

unit:mm

3054A-DIP16F

**Specifications**Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC} \text{ max}$		16	V
Allowable power dissipation	$P_d \text{ max}$		1.9	W
Differential input voltage	V_{ID}	Amplifier 2, amplifier 3	15	V
Common-mode input voltage	V_{ICM}	Amplifier 2, amplifier 3	15	V
Maximum input voltage	$V_{INB} \text{ max}$	Buffer amplifier	15	V
Maximum flow-in current at muting pin	$I_M \text{ max}$		1	mA
Maximum output current	$I_O \text{ max}$		0.7	A
Operating temperature	T_{opr}		-20 to +75	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Operating Conditions at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC}		5	V
Load resistance	R_L	Between pins 3 and 6, 11 and 14	8	Ω

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LA6534

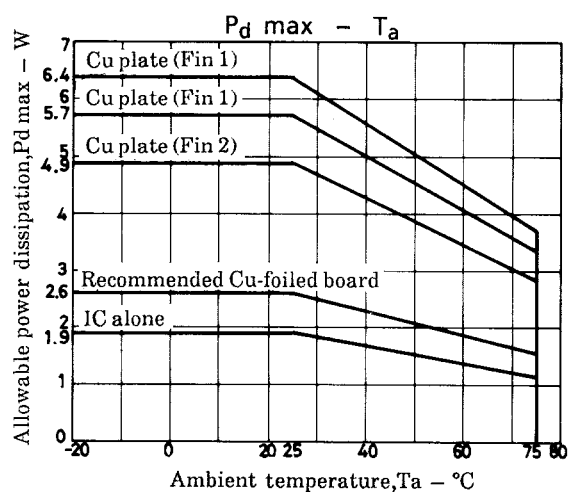
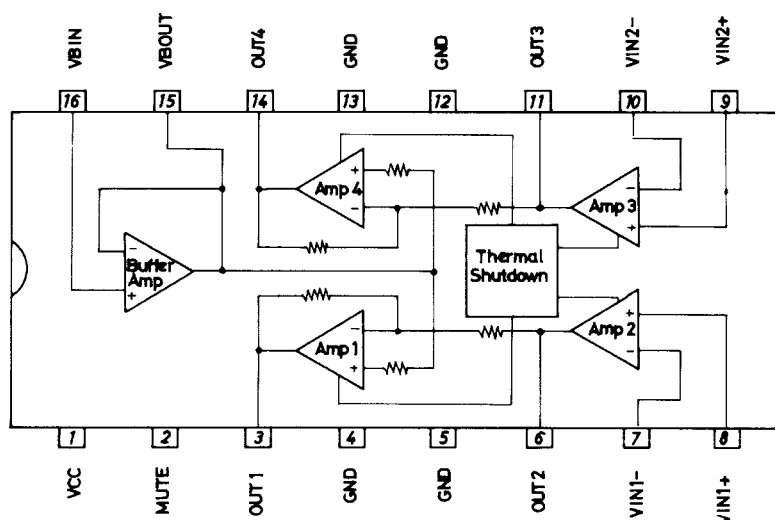
Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC}=5.0\text{V}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
No-loaded current drain 1	I_{CC1}	Mute OFF, pins 8, 9, 16 : GND	5	10	20	mA
No-loaded current drain 2	I_{CC2}	Mute OFF, pins 8, 9, 16 : GND	3	7	15	mA
No-loaded current drain 3	I_{CC3}	Mute OFF, pins 8, 9, 16 : $1/2 V_{CC}$	10	20	30	mA
No-loaded current drain 4	I_{CC4}	Mute OFF, pins 8, 9, 16 : $1/2 V_{CC}$	4	8	16	mA
Output offset voltage 1	V_{OF1}	Out 1 and Out 2	-50		+50	mV
Output offset voltage 2	V_{OF2}	Out 4 and Out 3	-50		+50	mV
Buffer input-output voltage difference	V_{BIO}	Buffer amplifier	-30		+30	mV
Buffer input voltage range	V_{BICM}	Buffer amplifier	1.5		$V_{CC}-1.5$	V
Common-mode input voltage range	V_{ICM}	Amplifier 2, amplifier 3	1.0		$V_{CC}-1.5$	V
Input bias current	I_B			50	300	nA
Output voltage	V_O	8Ω load between pins 3 and 6, 11 and 14.	2.8	3.3		V
Bridge output voltage difference	V_{OD}	8Ω load between pins 3 and 6, 11 and 14.	1.8	2.2		V
Closed-circuit voltage gain	V_G	Specified circuit, $f=1\text{kHz}$	30	38		dB
Slew rate	SR	Pins 3 to 6, 11 to 14		0.8		V/ μs
Muting pin on-state voltage	V_M			0.7		V
Muting pin flow-in current	I_M			3		μA

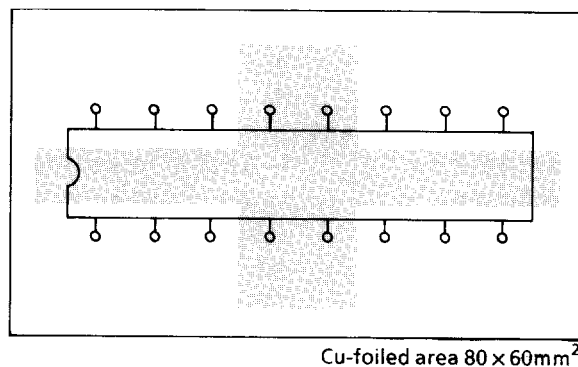
Note) The LA6534 is so designed that the outputs at OUT1 to OUT4 are turned OFF and the output at VBOUT is not turned OFF at the muting-ON mode.

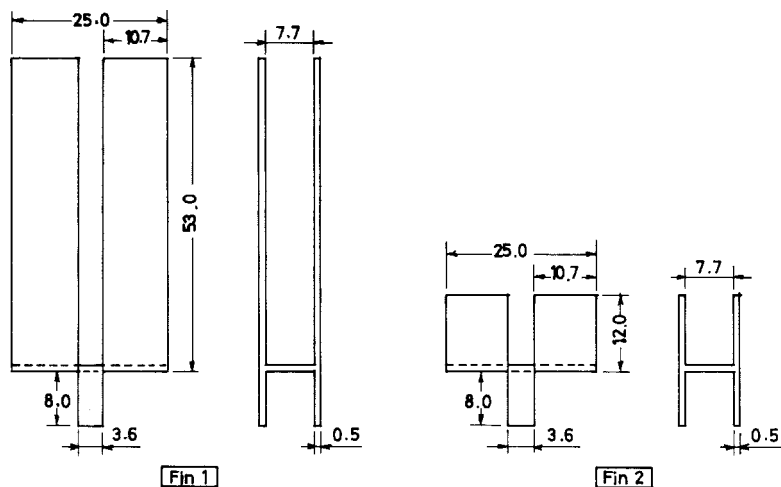
Note) Be careful in handling the LA6534, because dielectric breakdown is liable to occur.

Equivalent Circuit Block Diagram



Sample Printed Circuit Pattern





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