

The LA6533 is a 2-channel BTL-use driver designed for compact disc pickup actuation or a 4-channel driver for general-purpose applications.

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
- On-chip thermal shutdown
- Output of amps 1 to 4 at muting-ON mode : OFF

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

			unit
Maximum Supply Voltage	$V_{CC} \text{ max}$	16	V
Allowable Power Dissipation	$P_d \text{ max}$	1.9	W
Maximum Input Voltage	$V_{INB} \text{ max}$ Buffer amp	15	V
Muting Pin Current	$I_M \text{ max}$	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 $T_a = 25^\circ\text{C}$

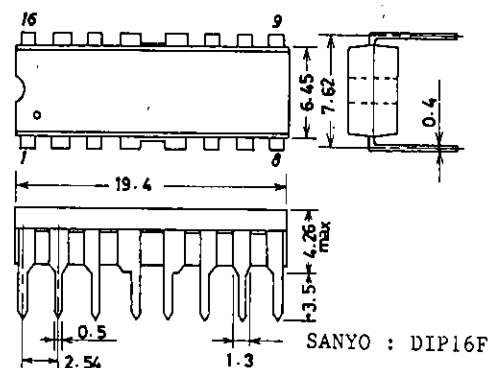
			unit
Maximum Supply Voltage	V_{CC}	5	V
Load Resistance	R_L Pins 3-6,11-14	8	Ω

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

			min	typ	max	unit
No-Loaded Current Dissipation 1	I_{CC1} Mute OFF (Note 1)		5	10	20	mA
No-Loaded Current Dissipation 2	I_{CC2} Mute ON		3	7	15	mA
No-Loaded Current Dissipation 3	I_{CC3} Mute OFF (Note 2)		10	20	30	mA
No-Loaded Current Dissipation 4	I_{CC4} Mute ON		4	8	16	mA
Output Offset Voltage 1	V_{OF1} Out 1 - Out 2		-50		50	mV
Output Offset Voltage 2	V_{OF2} Out 3 - Out 4		-50		50	mV

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Package Dimensions 3054A-D16FNIC (unit : mm)

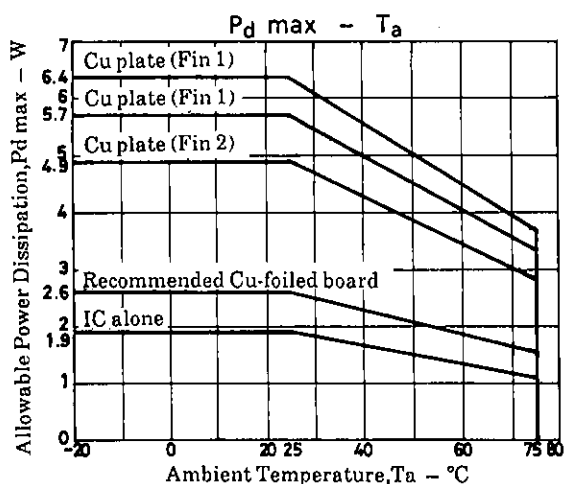
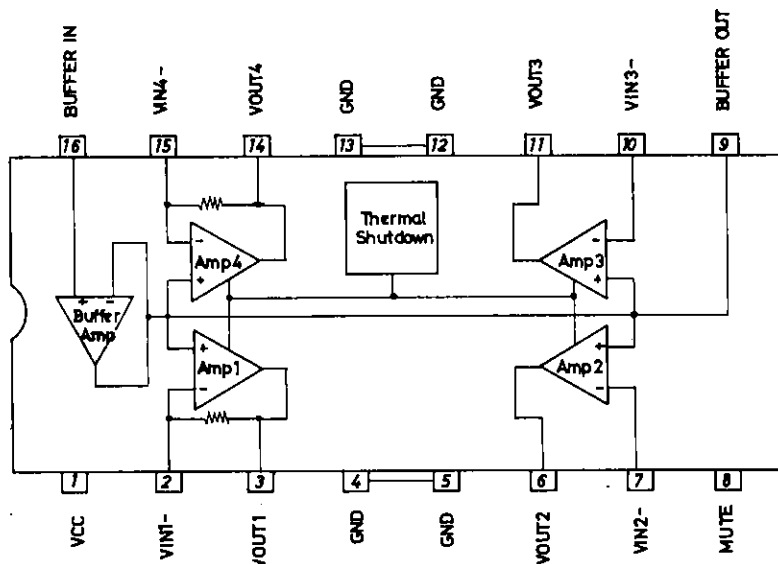


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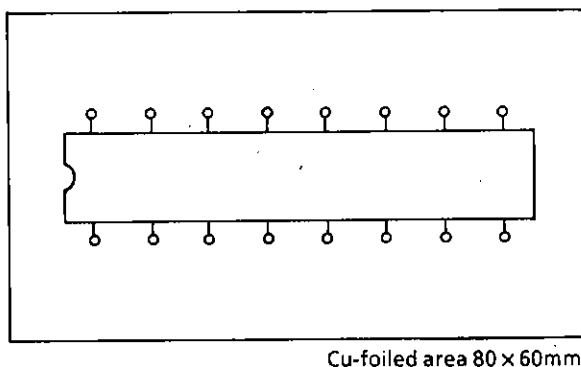
			min	typ	max	unit
Buffer Input-Output Voltage Difference	V_{BIO}	Buffer amp	-30		30	mV
Buffer Input Voltage Range	V_{BICM}	Buffer amp	1.5	$V_{CC}-1.5$		V
Amp Input Voltage Range	V_{ICM}		1.0	$V_{CC}-1.5$		V
Input Bias Current	I_B			50		nA
Output Voltage	V_O	$R_L=8.0\Omega$	2.8	3.3		V
Bridge Output Voltage Difference	V_{OD}	Pins 3-6,11-14 8Ω load	1.8	2.2		V
Closed-Circuit Voltage Gain	V_G			6.0		dB
Muting Pin ON-State Voltage	V_M			0.7		V
Muting Pin Flow-in Current	I_M			3.0		μA

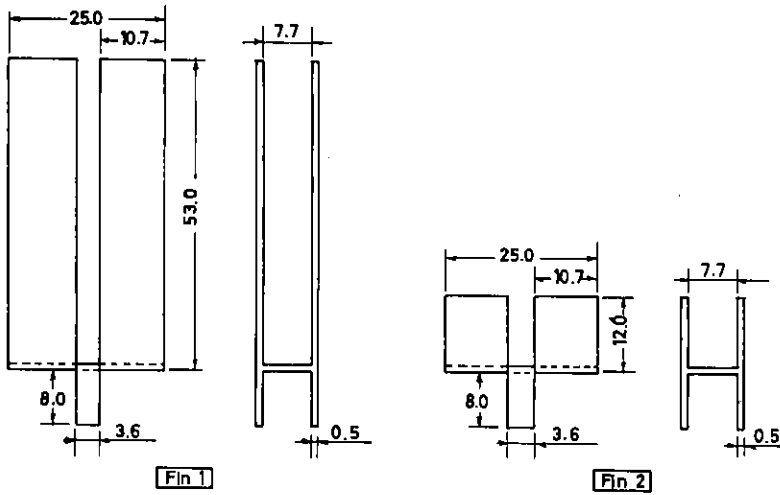
Note 1) Pins 2, 7, 10, 15 : GND
 Note 2) Pins 2, 7, 10, 15 : $1/2V_{CC}$

Equivalent Circuit Block Diagram

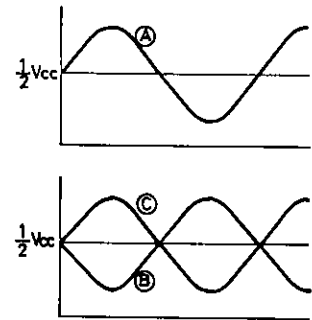
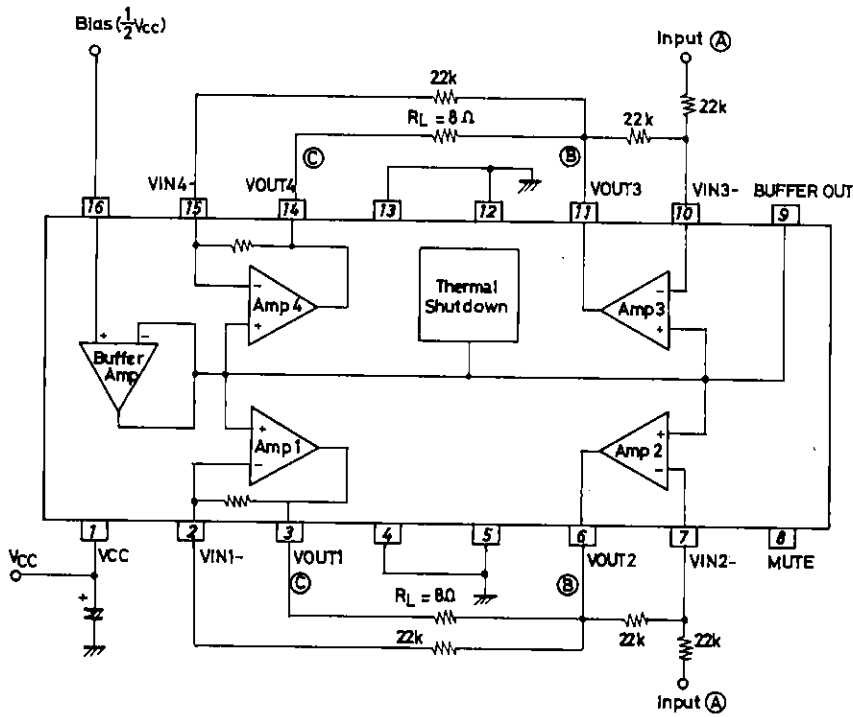


Sample Printed Circuit Pattern





Sample Application Circuit



Unit (resistance: Ω capacitance:F)

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