

Monolithic Linear IC

<b>SANYO</b>	No.3266	<b>LA6533</b>
	2-Channel BTL-Use or 4-Channel Driver	

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 ( $I_O$  max = 0.5A)
- 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	$V_{CC}$ max	16	V
Allowable Power Dissipation	$P_d$ max	1.9	W
Maximum Input Voltage	$V_{INB}$ max	15	V
Muting Pin Current	$I_M$ max	1	mA
Maximum Output Current	$I_O$ 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	$R_L$	8	$\Omega$

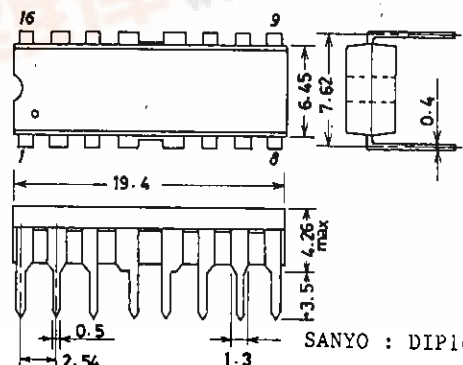
Pins 3-6,11-14

**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)



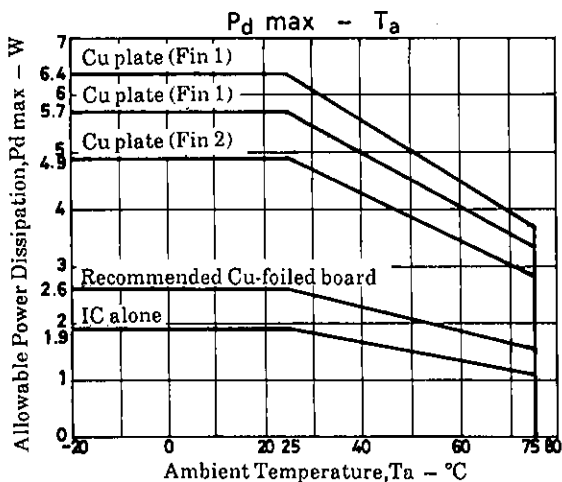
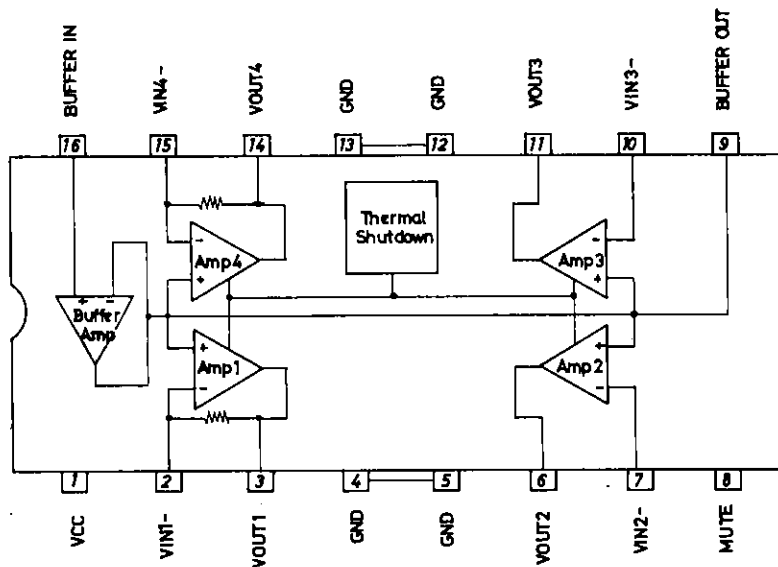
# LA6533

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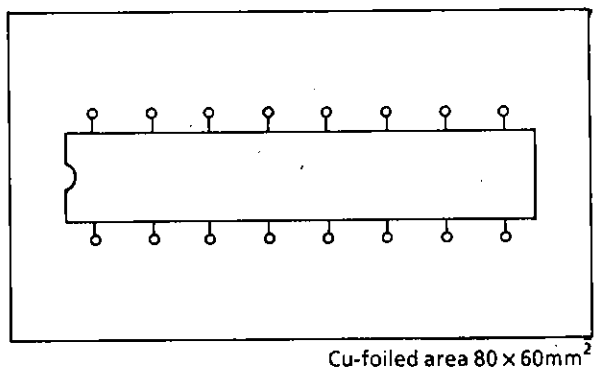
			min	typ	max	unit
Buffer Input-Output Voltage Difference	$V_{BIO}$	Buffer amp	-30		30	mV
Buffer Input Voltage Range	$V_{BICM}$	Buffer amp	1.5	$V_{CC}-1.5$		V
Amp Input Voltage Range	$V_{ICM}$		1.0	$V_{CC}-1.5$		V
Input Bias Current	$I_B$			50		nA
Output Voltage	$V_O$	$R_L=8.0\Omega$	2.8	3.3		V
Bridge Output Voltage Difference	$V_{OD}$	Pins 3-6,11-14 $8\Omega$ 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		$\mu A$

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

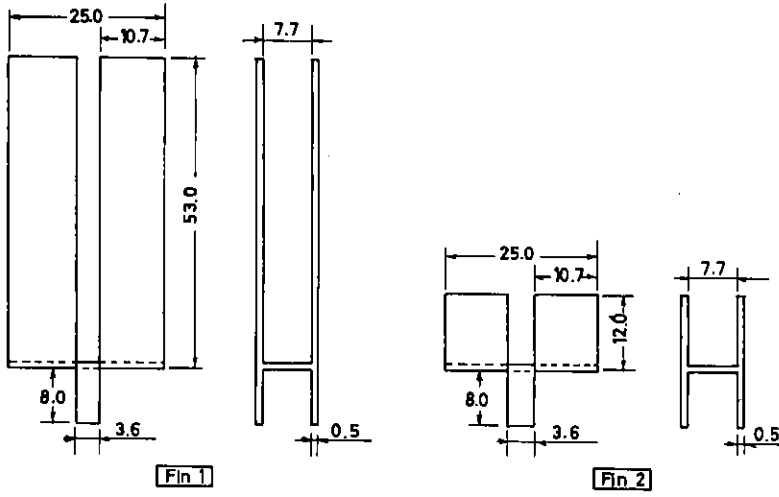
## Equivalent Circuit Block Diagram



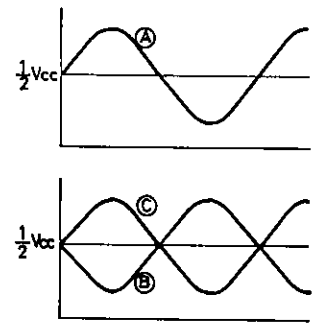
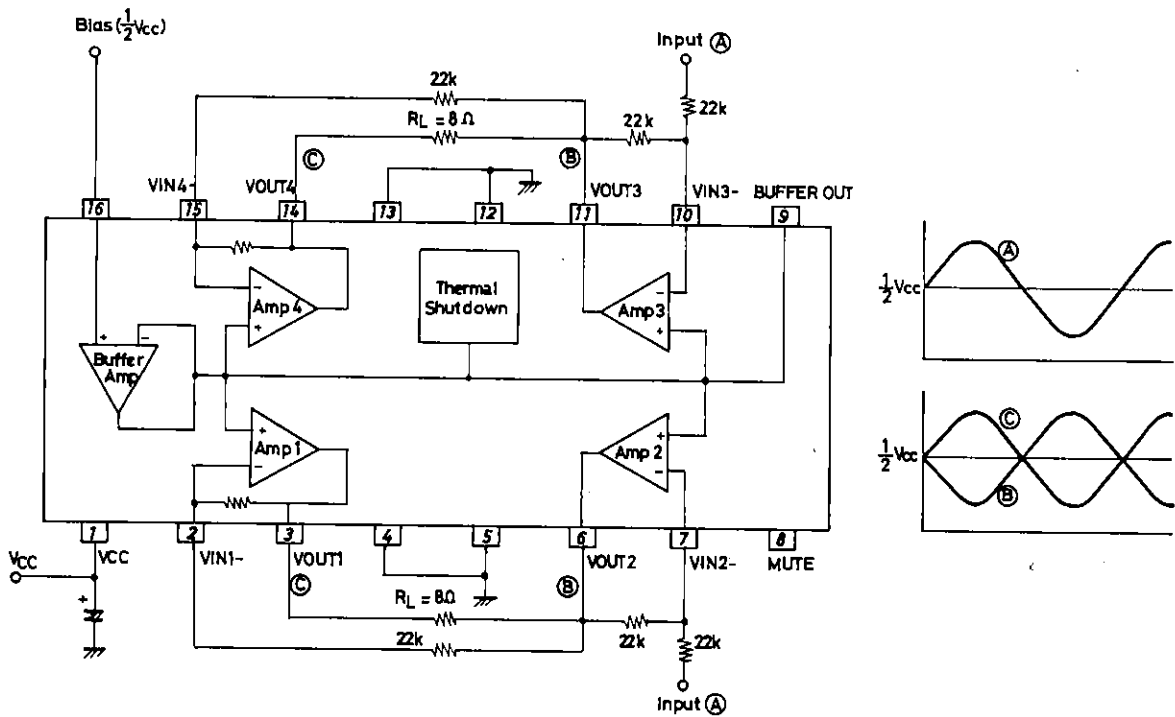
## Sample Printed Circuit Pattern



# LA6533



## Sample Application Circuit



Unit (resistance: $\Omega$  capacitance:F)

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