

LA6533

2-Channel BTL-Use or 4-Channel Driver

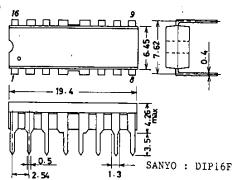
The LA6533 is a 2-channel BTL-use driver designed for compact disc pickup actuation or a 4-channel driver for general-purpose applications.

Functions and Features

- · High output current ($I_0 max = 0.5A$)
- · 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 Ta = 25°C							unit		
Maximum Supply Voltage	V_{CC}	max				16	v		
Allowable Power Dissipation	Pd m	ıax				1.9	W		
Maximum Input Voltage	V _{INB} max		Buffer amp			15	V		
Muting Pin Current	I _M max					1	mΑ		
Maximum Output Current	I _O max					0.7	Α		
Operating Temperature	Topr			-	– 20 to -	⊦75	$^{\circ}\mathrm{C}$		
Storage Temperature	Tstg			_	55 to +	150	$^{\circ}\mathrm{C}$		
Operating Conditions at Ta = 25°C							unit		
Maximum Supply Voltage	v_{cc}					5	V		
Load Resistance	R_L		Pins 3-6,11-14			8	Ω		
Operating Characteristics at Ta = 25°C, V _{CC} = 5.0V					min	typ	max	unit	
No-Loaded Current Dissipation 1		$I_{CC}1$	Mute OFF (Note 1)		5	10	20	mΑ	
		$I_{CC}2$	Mute ON	`	3	7	15	mΑ	
<u>-</u>		$I_{CC}3$	Mute OFF (Note 2)		10	20	30	mA	
		$I_{CC}4$	Mute ON		4	8	16	mA	
Output Offset Voltage 1		$V_{OF}1$	Out 1 - Out 2		-50		50	mV	
Output Offset Voltage 2		$V_{OF}2$	Out 3 - Out 4		 50		50	mV	
				Continued on next page.					

Package Dimensions 3054A-D16FNIC (unit:mm)



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			min	typ max	unit
Buffer Input-Output	V_{BIO}	Buffer amp	-30	30	mV
Voltage Difference					
Buffer Input Voltage Range	V_{BICM}	Buffer amp	1.5	$V_{\rm CC}-1.5$	V
Amp Input Voltage Range	V_{ICM}		1.0	$V_{\rm CC}-1.5$	V
Input Bias Current	$I_{\mathbf{B}}$			50	nА
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	$V_{\mathbf{G}}$			6.0	dB

 $V_{\mathbf{M}}$

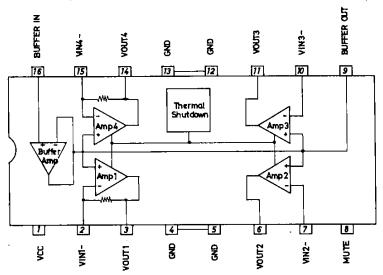
 I_{M}

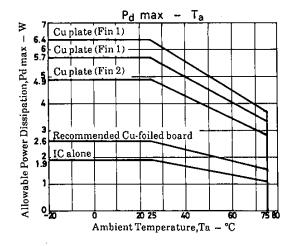
Note 1) Pins 2, 7, 10, 15: GND Note 2) Pins 2, 7, 10, 15: 1/2V_{CC}

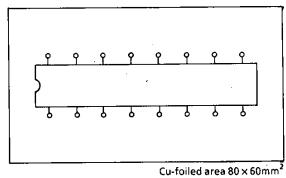
Muting Pin ON-State Voltage

Muting Pin Flow-in Current

Equivalent Circuit Block Diagram







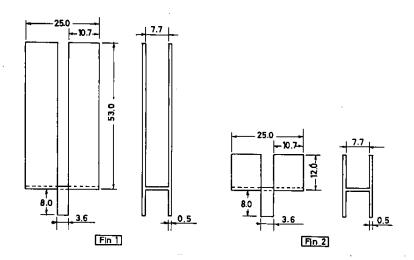
Sample Printed Circuit Pattern

0.7

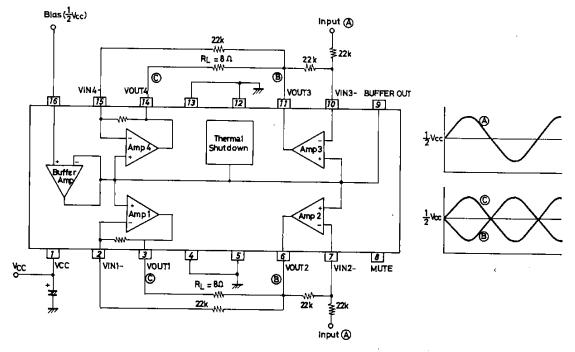
3.0

V

μΑ



Sample Application Circuit



Unit (resistance: Ω capacitance: F)

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