



The LA6530, 6531 are 2-channel BTL-use drivers designed for compact disc pickup actuation.

Functions and Features

- High output current (I_O max = 0.7A)
- Wide operating voltage range (4 to 15V)
- Low input bias current
- LA6530 Output of amps 1 to 4 at muting-ON mode : OFF
- LA6531 Output of amps 1 to 4 and buffer amp 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
Differential Input Voltage	V_{ID} Amp 2, amp 3	15	V
Common-Mode Input Voltage	V_{ICM} Amp 2, amp 3	15	V
Maximum Input Voltage	V_{INB} max Buffer amp	15	V
Maximum Flow-in Current at Muting Pin	I_M max	1.0	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 $T_a = 25^\circ\text{C}$

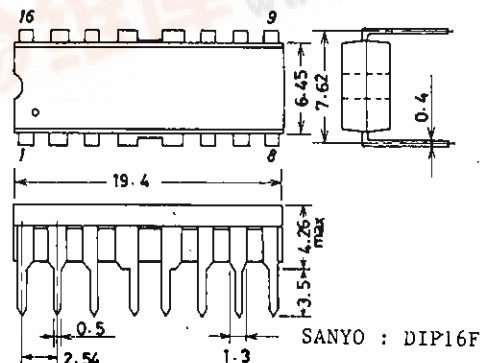
			unit
Maximum Supply Voltage	V_{CC} max	5	V
Load Resistance	R_L	8	Ω

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, pins 8,9,16 GND	5	10	20	mA
No-Loaded Current Dissipation 2	I_{CC2}	Mute OFF, pins 8,9,16 GND	3	7	15	mA
No-Loaded Current Dissipation 3	I_{CC3}	Mute OFF, pins 8,9,16 1/2 V_{CC}	10	20	30	mA
No-Loaded Current Dissipation 4	I_{CC4}	Mute OFF, pins 8,9,16 1/2 V_{CC}	4	8	16	mA

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Package Dimensions 3054A-D16FNIC (unit : mm)



LA6530, 6531

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			min	typ	max	unit
Output Offset Voltage 1	V_{OF1}	Out 1 - Out 2	-50		50	mV
Output Offset Voltage 2	V_{OF2}	Out 4 - Out 3	-50		50	mV
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
Common-Mode Input Voltage Range	V_{ICM}	Amp 2, amp 3	1.0	$V_{CC} - 1.5$		V
Input Bias Current	I_B			50	300	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		30	38		dB
Muting Pin ON-State Voltage	V_M			0.7		V
Muting Pin Flow-in Current	I_M			3		μA

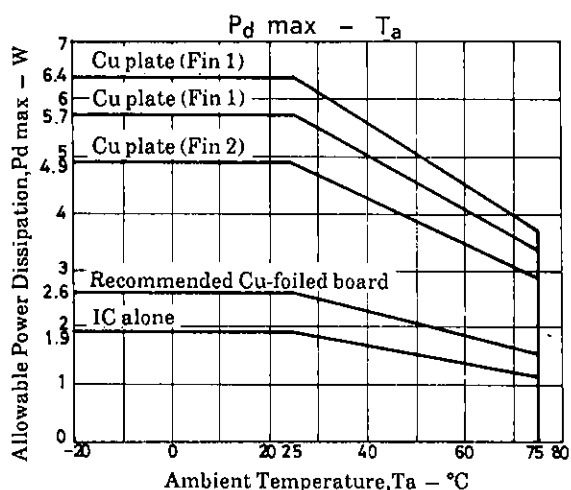
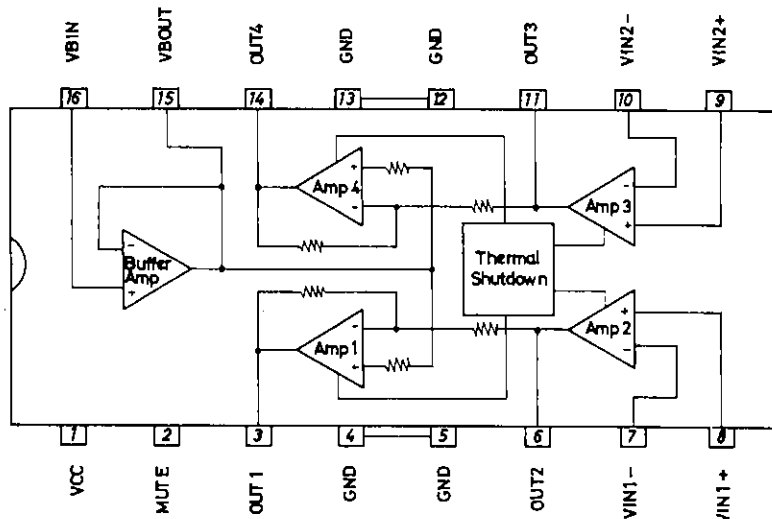
Note) With thermal shutdown function

※ : The LA6530 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.

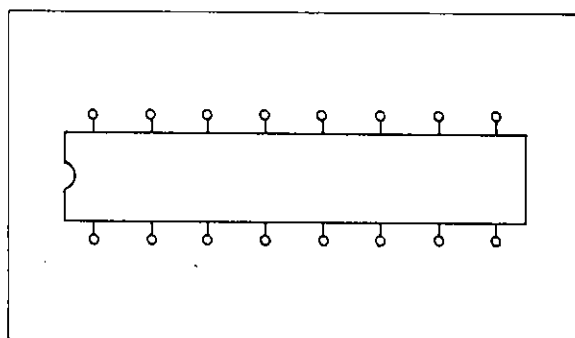
※ : The LA6531 is so designed that the outputs at OUT1 to OUT4 and the output at VBOUT are turned OFF.

※ : Be careful in handling the LA6530, 6531, because dielectric breakdown is liable to occur.

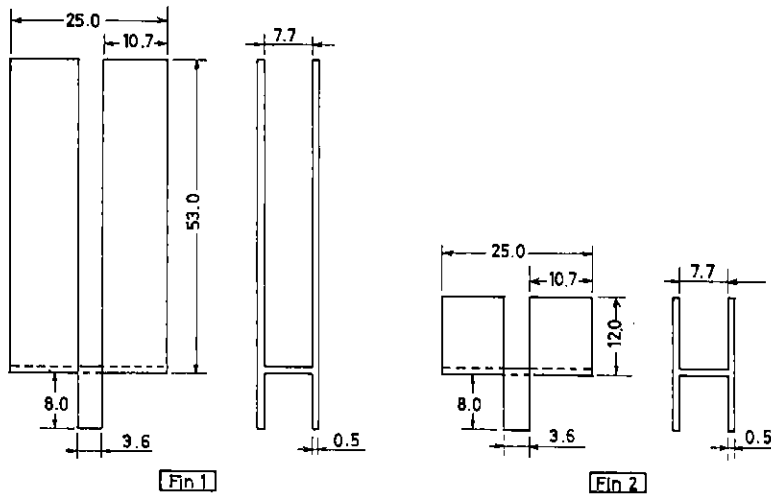
Equivalent Circuit Block Diagram



Sample Printed Circuit Pattern



Cu-foiled area $80 \times 60 \text{mm}^2$



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