

**SANYO**

No.3264

**LA6530,6531****2-Channel BTL-Use Drivers**

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	$^\circ\text{C}$

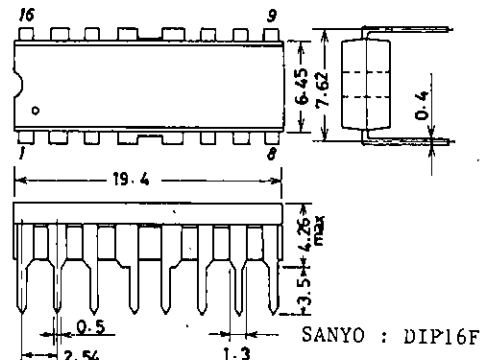
**Operating Conditions at  $T_a = 25^\circ\text{C}$** 

			unit
Maximum Supply Voltage	$V_{CC}$ max	5	V
Load Resistance	$R_L$	8	$\Omega$

**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

Continued on next page.

**Package Dimensions 3054A-D16FNIC  
(unit : mm)**

Continued from preceding page.

			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 $8\Omega$ 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		$\mu A$

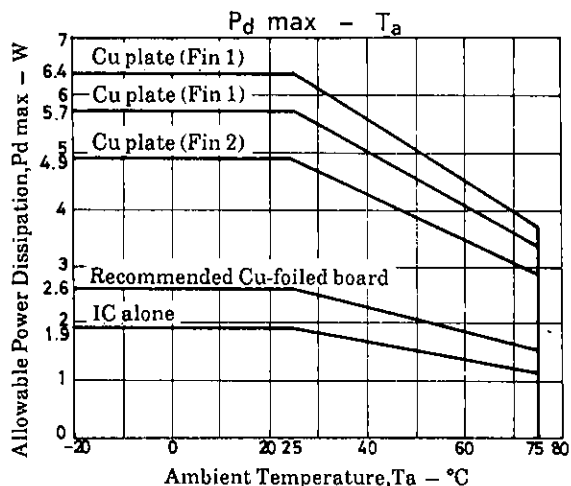
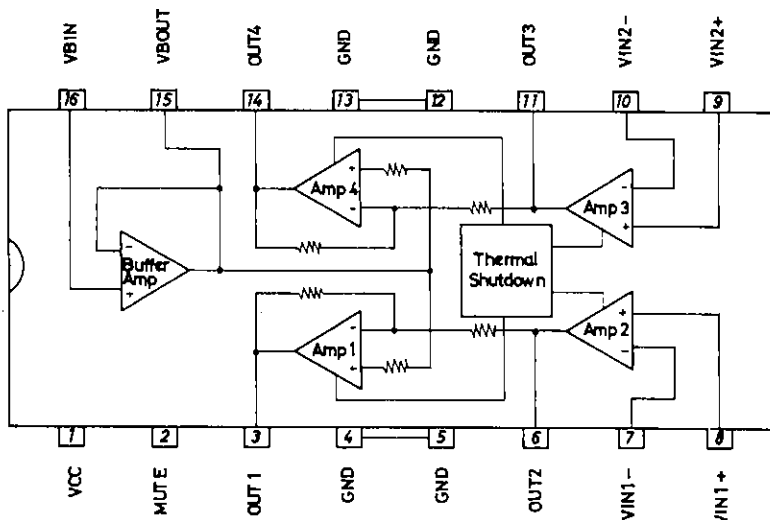
Note) With thermal shutdown function

※ : 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.

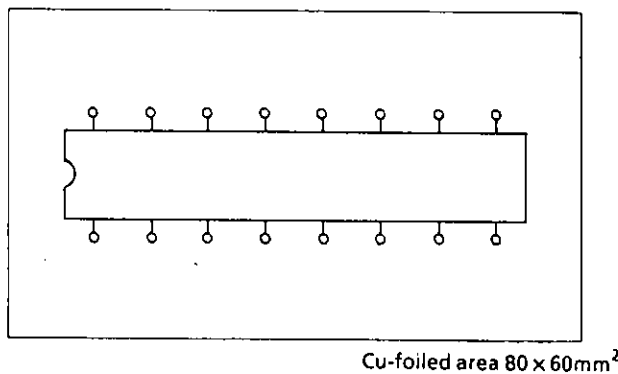
※ : The LA6531 is so designed that the outputs at OUT1 to OUT4 and the output at VBOUT are turned OFF.

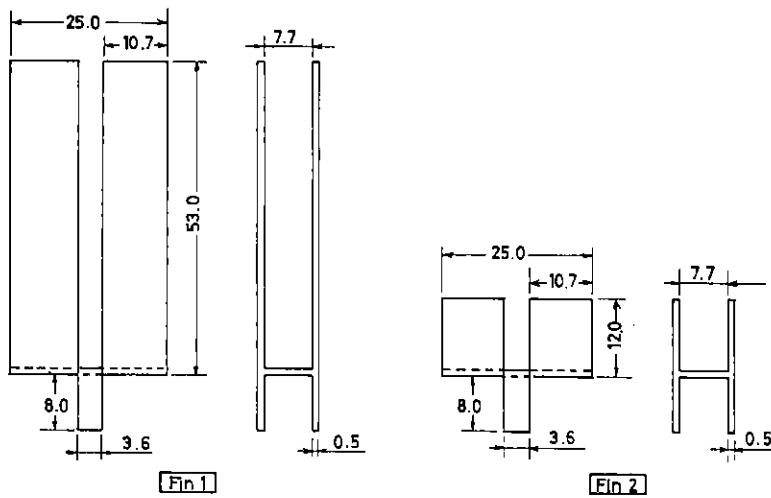
※ : Be careful in handling the LA6530, 6531, because dielectric breakdown is liable to occur.

Equivalent Circuit Block Diagram



Sample Printed Circuit Pattern





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