

The LA6532M is a 4-channel BTL-use driver designed for compact disc pickup actuation.

Functions and Features

- BTL-use 4-channel power amp
- I_O max 700mA × 2400mA × 2 (with voltage limiter)
- With muting function

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

			unit
Maximum Supply Voltage	V_{CC} max	9	V
Allowable Power Dissipation	P_d max	0.9	W
Differential Input Voltage	V_{ID}	8	V
Common-Mode Input Voltage	V_{ICM}	8	V
Maximum Input Voltage	V_{INB} max	8	V
Muting Pin Voltage	V_{Mute}	8	V
Operating Temperature	T_{opr}	-20 to +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

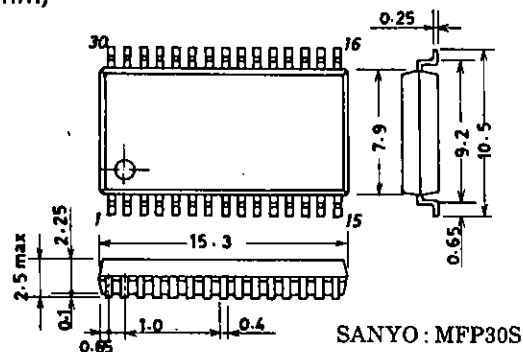
			unit
Maximum Supply Voltage	V_{CC}	5	V
Load Resistance	R_L	Pins 3-4,12-13,18-19,27-28	Ω

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}	Note 1	25	40	60	mA
No-Loaded Current Dissipation 2	I_{CC2}	Note 2	5	9	20	mA
No-Loaded Current Dissipation 3	I_{CC3}	Note 3	25	40	60	mA
No-Loaded Current Dissipation 4	I_{CC4}	Note 4	5	9	20	mA
Output Offset Voltage 1	V_{OF1}	Note 5 Amp 1-2,7-8	-50		50	mV
Output Offset Voltage 2	V_{OF2}	Note 5 Amp 3-4,5-6	-30		30	mV

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Package Dimensions 3073A-M30IC (unit : mm)



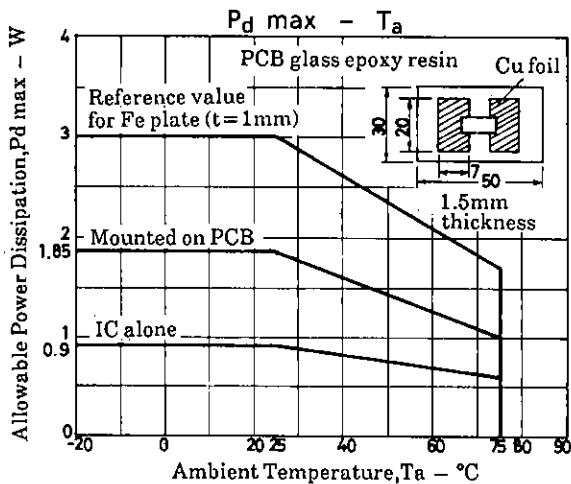
SANYO : MFP30S

LA6532M

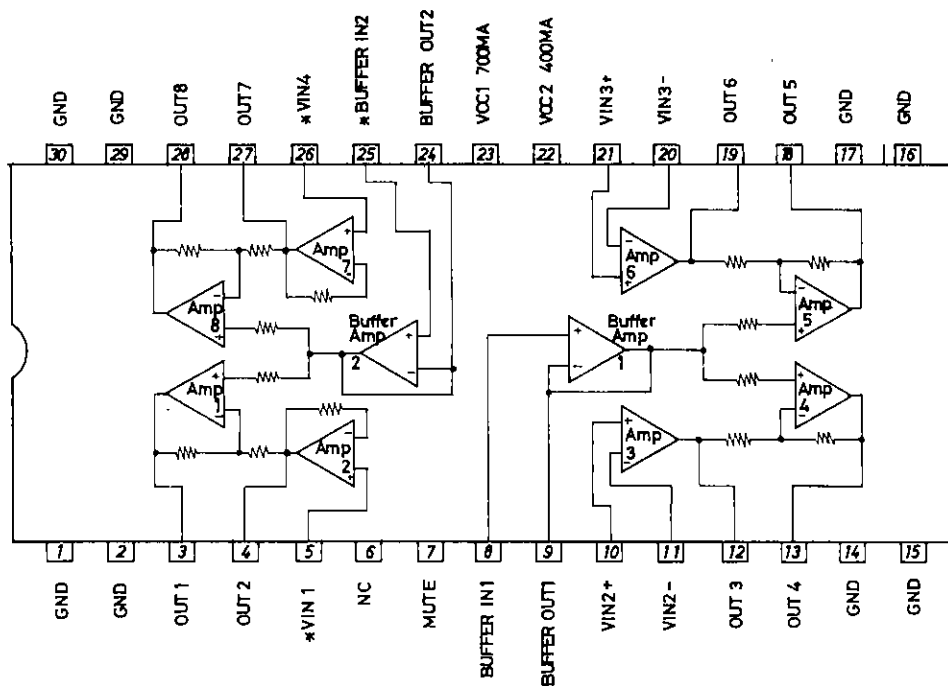
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			min	typ	max	unit
Buffer 1 Input-Output Voltage Difference	V_{BIO1}	Buffer amp 1	-30		30	mV
Buffer 2 Input-Output Voltage Difference	V_{BIO2}	Buffer amp 2	0.5	0.6	0.8	V
Amp 2 Input-Output Voltage Difference	V_{IO2}	Amp 2	0.5	0.6	0.8	V
Amp 7 Input-Output Voltage Difference	V_{IO7}	Amp 7	0.5	0.6	0.8	V
Input Bias Current	I_B	Note 6		100	500	nA
Buffer Input Voltage Range	V_{BICM}	Buffer amp	1.5	$V_{CC}-1.5$		V
Common-Mode Input Voltage Range	V_{ICM}		1.0	$V_{CC}-1.5$		V
Output Source Voltage	V_{O1}	$R_L=8.0\Omega$ 700mA amp (Note 7)	3.4	3.6		V
Output Sink Voltage	V_{O2}	$R_L=8.0\Omega$ 700mA amp (Note 8)		1.0	1.4	V
Output Source Voltage	V_{O3}	$R_L=8.0\Omega$ 400mA amp (Note 7)	2.8	3.4		V
Output Sink Voltage	V_{O4}	$R_L=8.0\Omega$ 400mA amp (Note 8)		1.6	2.2	V
Closed-Circuit Voltage Gain	V_G			6.0		dB
Output Limiting Voltage	V_{OL}	Amp 3, amp 6		5.0		V
Muting Pin OFF-State Voltage	V_{Mute}			2.2		V
Muting Pin OFF-State Current	I_{Mute}			80		A

- Note 1 Muting OFF. Buffer 22k Ω across V_{IN-} and V_O . V_{IN+} pin grounded
 - Note 2 Muting ON. Buffer 22k Ω across V_{IN-} and V_O . V_{IN+} pin grounded
 - Note 3 Muting OFF. Buffer 22k Ω across V_{IN-} and V_O . V_{IN+} pin connected to $1/2V_{CC}$
 - Note 4 Muting ON. Buffer 22k Ω across V_{IN-} and V_O . V_{IN+} pin connected to $1/2V_{CC}$
 - Note 5 For bridge amp, represents the difference between outputs.
 - Note 6 All V_{IN} connected to $1/2V_{CC}$. 100k Ω connected to the input. Measure the voltage difference. V_{IN} and V_O connected through 100k Ω . Measure the voltage difference between pins.
 - Note 7 Voltage (source) relative to GND when 8 Ω load is connected across outputs of bridge amp
 - Note 8 Voltage (sink) relative to GND when 8 Ω load is connected across outputs of bridge amp
- ※ : Be carefull in handling the LA6532M, because dielectric breakdown is liable to occur.



Equivalent Circuit Block Diagram



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