

| | | |
|-------|--------------------------|---------|
| SANYO | No.3265 | LA6532M |
| | 4-Channel BTL-Use Driver | |

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 Ta = 25°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 | °C |
| Storage Temperature | T_{stg} | - 55 to + 150 | °C |

Operating Conditions at Ta = 25°C

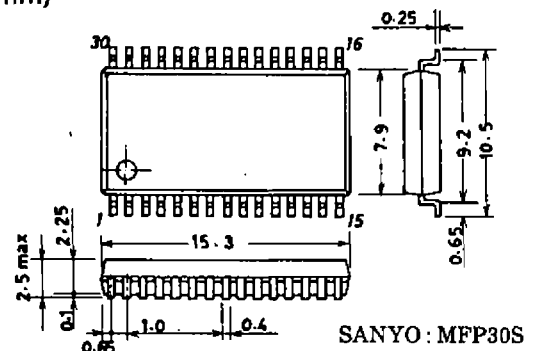
| | | | unit |
|------------------------|----------|----------------------------|------------|
| Maximum Supply Voltage | V_{CC} | 5 | V |
| Load Resistance | R_L | Pins 3-4,12-13,18-19,27-28 | 8 Ω |

Operating Characteristics at Ta = 25°C, V_{CC} = 5.0V

| | | | 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 |

Continued on next page.

Package Dimensions 3073A-M30IC
(unit : mm)



LA6532M

Continued from preceding page.

| | | | 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 $22k\Omega$ across V_{IN-} and V_O . V_{IN+} pin grounded

Note 2 Muting ON. Buffer $22k\Omega$ across V_{IN-} and V_O . V_{IN+} pin grounded

Note 3 Muting OFF. Buffer $22k\Omega$ across V_{IN-} and V_O . V_{IN+} pin connected to $1/2V_{CC}$

Note 4 Muting ON. Buffer $22k\Omega$ across V_{IN-} and V_O . V_{IN+} pin connected to $1/2V_{CC}$

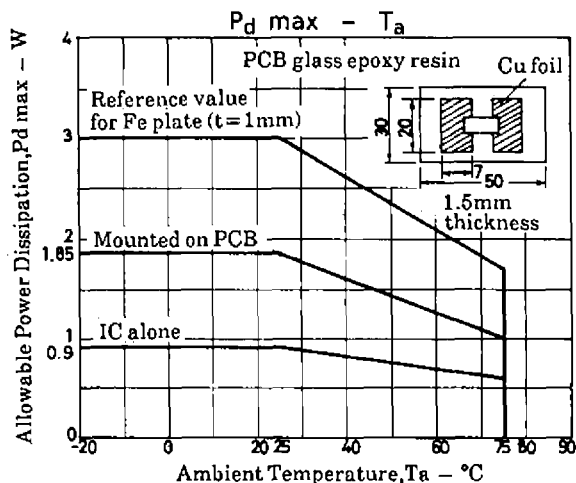
Note 5 For bridge amp, represents the difference between outputs.

Note 6 All V_{IN} connected to $1/2V_{CC}$. $100k\Omega$ connected to the input. Measure the voltage difference. V_{IN} and V_O connected through $100k\Omega$. Measure the voltage difference between pins.

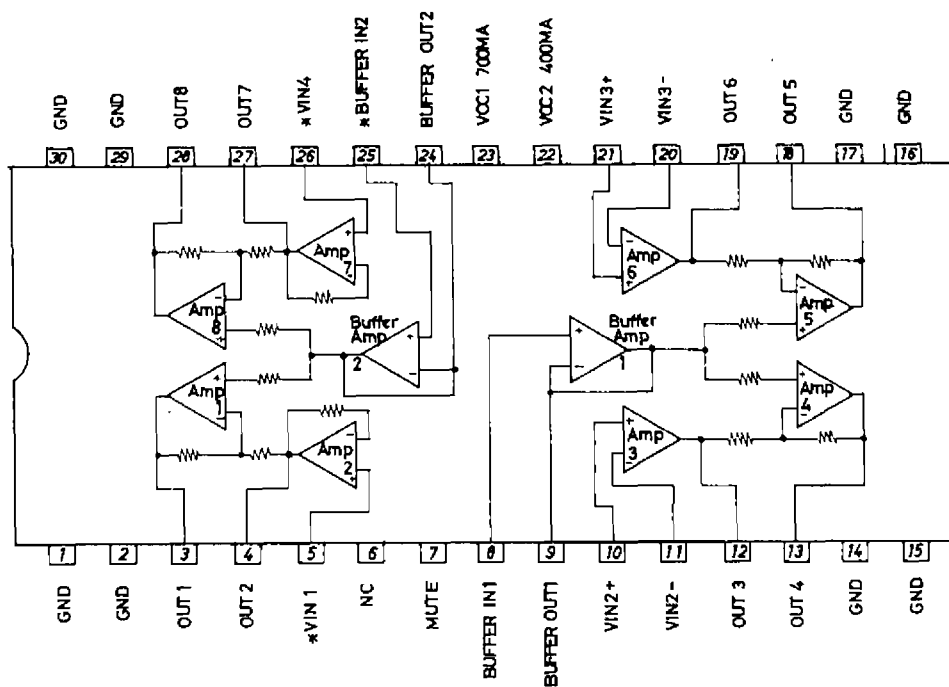
Note 7 Voltage (source) relative to GND when 8Ω load is connected across outputs of bridge amp

Note 8 Voltage (sink) relative to GND when 8Ω 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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