

Monolithic Linear IC

|              |                                    |               |
|--------------|------------------------------------|---------------|
| <b>SANYO</b> | No.2626A                           | <b>LA6501</b> |
|              | <b>Power Operational Amplifier</b> |               |

**Features**

- . High output current ( $I_o \text{ max}=1.0\text{A}$ )
- . High gain
- . With current limiter
- . Capable of being operated from single supply

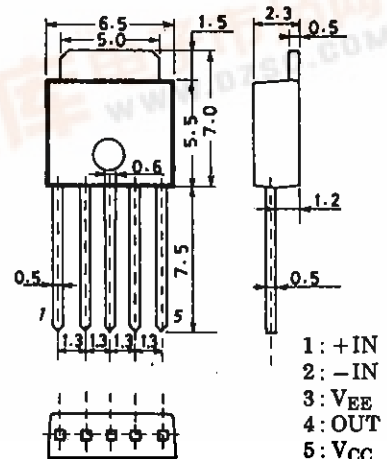
**Maximum Ratings at  $T_a=25^\circ\text{C}$**

|                             |                   |             | unit             |
|-----------------------------|-------------------|-------------|------------------|
| Maximum Supply Voltage      | $V_{CC}/V_{EE}$   | $\pm 18$    | V                |
| Differential Input Voltage  | $V_{IDif}$        | 30          | V                |
| Common-Mode Input Voltage   | $V_{ICOM}$        | $\pm 14$    | V                |
| Output Current              | $I_o \text{ max}$ | 1.0         | A                |
| Allowable Power Dissipation | $P_d \text{ max}$ | 1           | W                |
| Operating Temperature       | $T_{opr}$         | -20 to +75  | $^\circ\text{C}$ |
| Storage Temperature         | $T_{stg}$         | -55 to +150 | $^\circ\text{C}$ |

**Operating Characteristics at  $T_a=25^\circ\text{C}, V_{CC}/V_{EE}=\pm 15\text{V}$**

|                                 |           |   | min | typ      | max | unit                   |
|---------------------------------|-----------|---|-----|----------|-----|------------------------|
| Quiescent Current Dissipation   | $I_{cco}$ |   |     | 6        |     | mA                     |
| Input Offset Voltage            | $V_{IO}$  | $R_s \leq 10\text{kohms}$                                     |     | 2        |     | mV                     |
| Input Offset Current            | $I_{IO}$  |   |     | 10       |     | nA                     |
| Input Bias Current              | $I_B$     |   |     | 100      |     | nA                     |
| Common-Mode Input Voltage Range | $V_{ICM}$ |   | -15 |          | +13 | V                      |
| Common-Mode Rejection           | CMR       |   |     | 80       |     | dB                     |
| Maximum Output Voltage          | $V_o$     | $R_L=33\text{ohms}$   |     | $\pm 13$ |     | V                      |
| Voltage Gain                    | $V_{GO}$  |   |     | 100      |     | dB                     |
| Slew Rate                       | SR        | $G_V=0, R_L=33\text{ohms}, R=10\text{ohms}, L=0.1\mu\text{F}$ |     | 0.15     |     | V/ $\mu\text{s}$       |
| Equivalent Input Noise Voltage  | $V_{NI}$  | $R_g=1\text{kohm}, \text{DIN Audio}$                          |     | 2        |     | $\mu\text{V}$          |
| Supply Voltage Rejection        | SVR       |   |     | 30       |     | $\mu\text{V}/\text{V}$ |
| Limiting Current                | $I_{sc}$  |   |     | 1.00     |     | A                      |

Package Dimensions 3103  
(unit : mm)

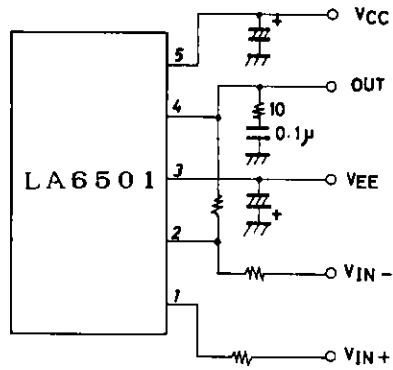


SANYO: TP5H

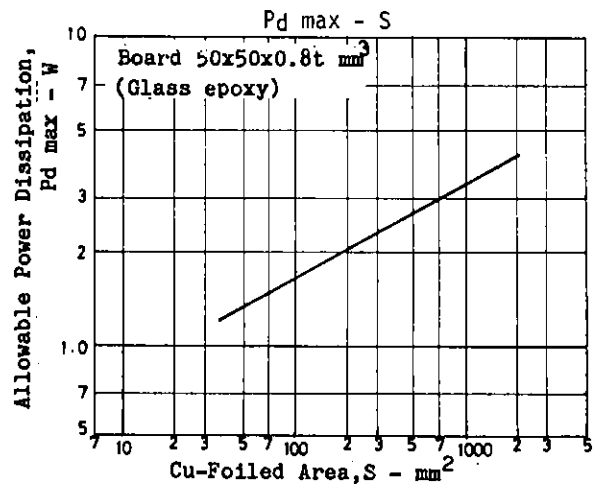
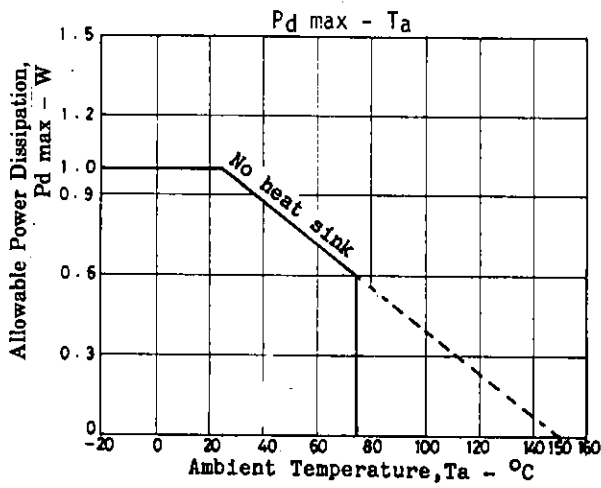


# LA6501

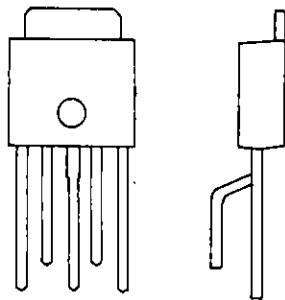
## Sample Application Circuit



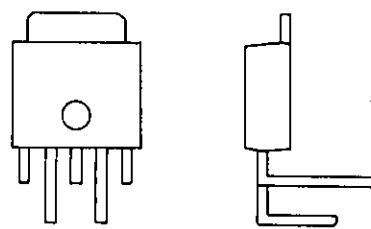
Unit (capacitance: F)



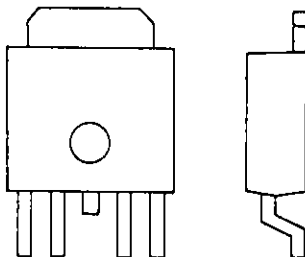
## Lead Formings



MA forming



LR forming



FA forming

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