Ordering number:ENN2626A

Monolithic Linear IC

LA6501

Power Operational Amplifier

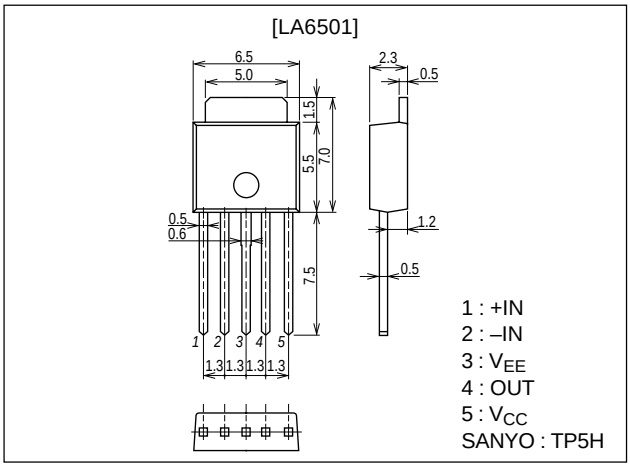
Features

- High output current (I_O max=1.0A).
- High gain.
- With current limiter.
- Capable of being operated from single supply.

Package Dimensions

unit:mm

3103



Specifications

Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC}/V_{EE}		±18	V
Differential input voltage	V_{IDIf}		30	V
Common-mode input voltage	V_{ICOM}		±14	V
Output current	I_O max		1.0	A
Allowable power dissipation	Pd max		1	W
Operating temperature	Topr		–20 to +75	˚C
Storage temperature	Tstg		–55 to +150	˚C

Operating Characteristics at Ta = 25˚C, V_{CC}/V_{EE}=±15V

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Quiescent current drain	I_{CCO}			6		mA
Input offset voltage	V_{IO}	R_S≤10kΩ		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	Vo	R_L=33Ω		±13		V
Voltage gain	V_{GO}			100		dB
Slew rate	SR	GV=0, R_L=33Ω, R=10Ω, L=0.1μF		0.15		V/μs

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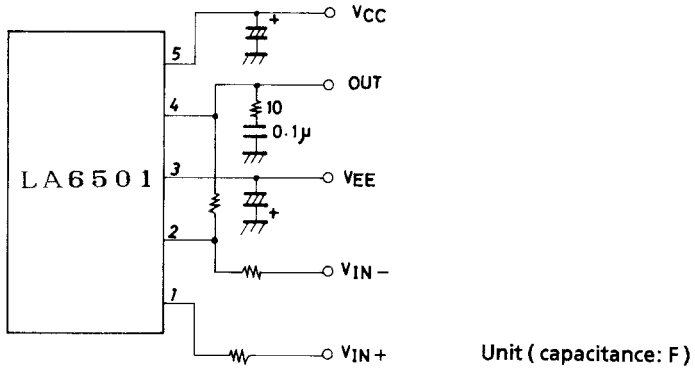
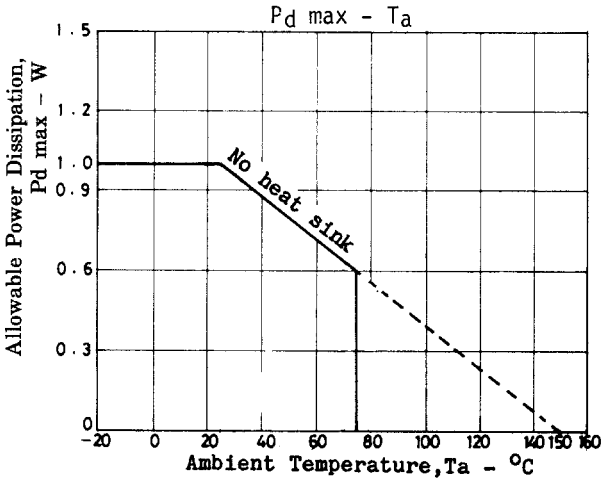
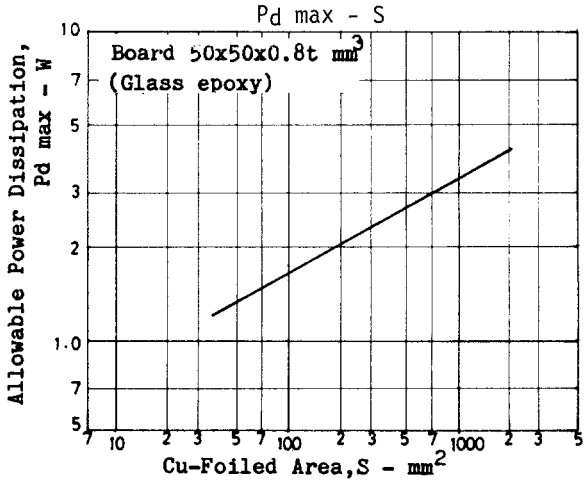
Continued from preceding page.

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Equivalent input noise voltage	V_{NI}	Rg=1kΩ, DIN Audio		2		μV
Supply voltage rejection	SVR			30		μV/V
Limiting current	Isc			1.00		A

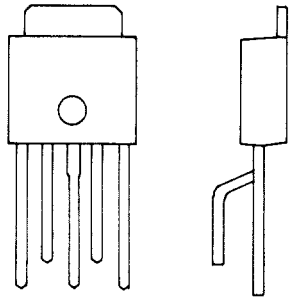
Sample Application Circuit



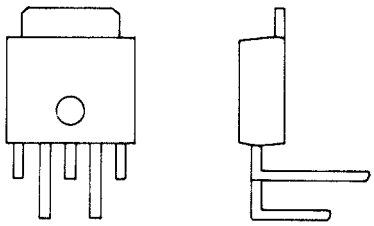




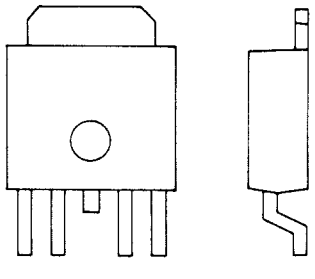
Lead Formings



MA forming



LR forming



FA forming