Ordering number: EN2623D

Monolithic Linear IC

**LA6500** 

## **Power Operational Amplifier**



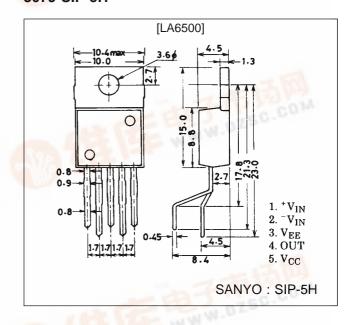
### **Features**

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

# Package Dimensions

unit: mm

#### 3079-SIP-5H



## **Specifications**

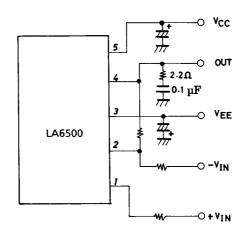
#### Maximum Ratings at $Ta = 25^{\circ}C$

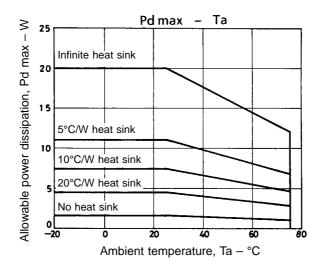
Parameter	Symbol	Conditions	Ratings	Unit	
Maximum supply voltage	V <sub>CC</sub> /V <sub>EE</sub>		±18	V	
Differential input voltage	V <sub>IDIf</sub>		30	V	
Common-mode input voltage	V <sub>ICOM</sub>		±15	V	
Output current	lo max	100	1.0	Α	
Allowable power dissipation	Pd max		1.75	W	
Operating temperature	Topr	_ LES   TEL	-20 to +75	°C	
Storage temperature	Tstg	130 7	-55 to +150	°C	

## Operating Characteristics at Ta = 25°C, $V_{\rm CC}/V_{\rm EE}$ = $\pm 15~V$

Parameter	Symbol	Conditions	min	typ	max	Unit
Quiescent current dissipation	Icco			6		mA
Input offset voltage	V <sub>IO</sub>	$Rs \le 10 \text{ k}\Omega$		2		mV
Input offset current	I <sub>IO</sub>			10		nA
Input bias current	Ι <sub>Β</sub>			100		nA
Common-mode input voltage	V <sub>ICM</sub>		-15		+13	V
range			10			
Common-mode rejection	CMR			80		dB
Maximum output voltage	Vo	$R_L = 33 \Omega$		±13		V
Voltage gain	VGO			100		dB
Slew rate	SR	$G_V = 0$ , $R_L = 33 \Omega$ , $R = 2.2 \Omega$ , $L = 0.1 \mu F$		0.15		V/µs
Equivalent input noise voltage	V <sub>NI</sub>	Rg = 1 k $\Omega$ , DIN Audio		2		μV
Supply voltage rejection	SVR			30		μV/V
Limiting current	I <sub>SC</sub>			1.00		Α

## **Sample Application Circuit**





#### **LA6500**

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