Monolithic Linear IC

LA6500

# **Power Operational Amplifier**

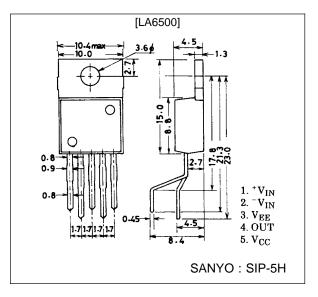
### **Features**

- 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	VICOM		±15	V
Output current	lo max		1.0	A
Allowable power dissipation	Pd max		1.75	W
Operating temperature	Topr		-20 to +75	°C
Storage temperature	Tstg		-55 to +150	°C

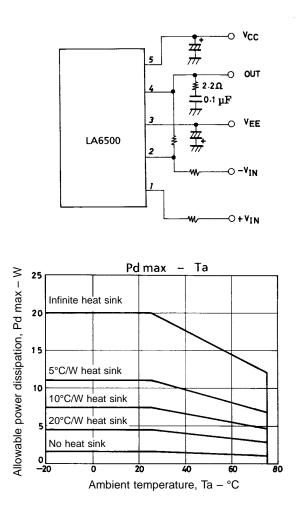
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Operating	Characteristics	at Ta =	25°C,	V <sub>CC</sub> /V <sub>EE</sub>	$=\pm 15 V$
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Parameter	Symbol	Conditions	min	typ	max	Unit
Quiescent current dissipation	Icco			6		mA
Input offset voltage	V <sub>IO</sub>	$Rs \leq 10 \ k\Omega$		2		mV
Input offset current	I <sub>IO</sub>			10		nA
Input bias current	I <sub>B</sub>			100		nA
Common-mode input voltage	N		-15		+13	V
range	VICM					
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		A

### **Sample Application Circuit**



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