



LA6500

Power Operational Amplifier

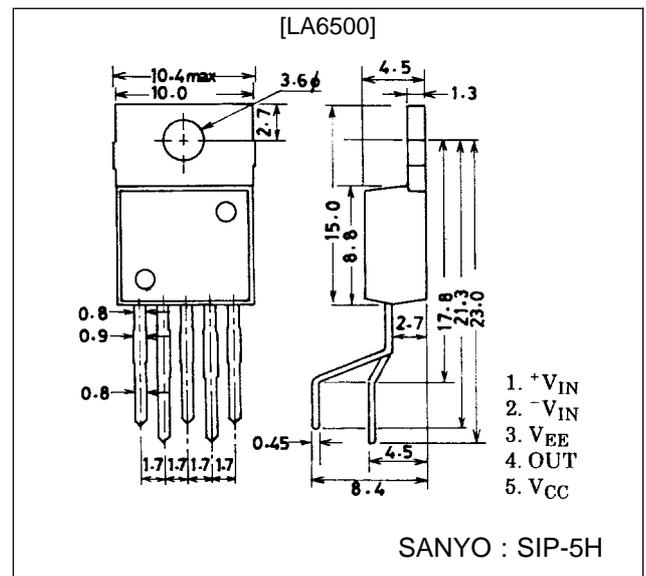
Features

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

Package Dimensions

unit : mm

3079-SIP-5H



Specifications

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

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}		± 15	V
Output current	$I_o \text{ max}$		1.0	A
Allowable power dissipation	$P_d \text{ max}$		1.75	W
Operating temperature	T_{opr}		-20 to $+75$	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to $+150$	$^\circ\text{C}$

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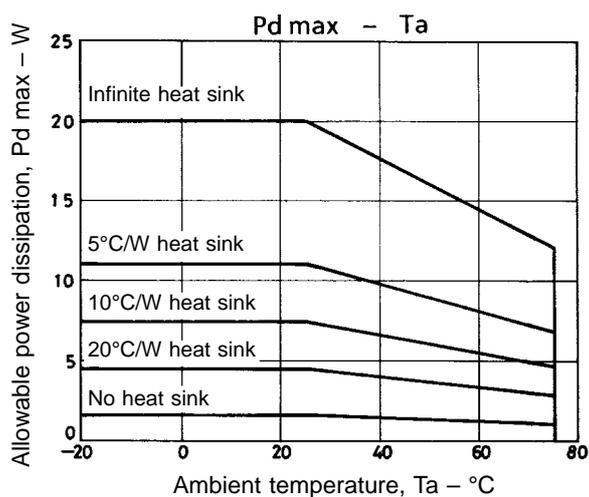
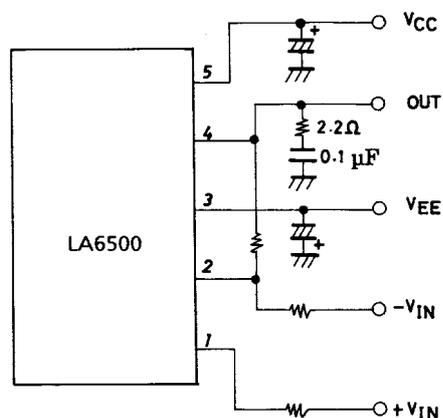
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LA6500

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

Parameter	Symbol	Conditions	min	typ	max	Unit
Quiescent current dissipation	I_{CCO}			6		mA
Input offset voltage	V_{IO}	$R_s \leq 10\text{ k}\Omega$		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	$R_L = 33\ \Omega$		± 13		V
Voltage gain	V_{G_O}			100		dB
Slew rate	SR	$G_V = 0$, $R_L = 33\ \Omega$, $R = 2.2\ \Omega$, $L = 0.1\ \mu\text{F}$		0.15		V/ μs
Equivalent input noise voltage	V_{NI}	$R_g = 1\text{ k}\Omega$, DIN Audio		2		μV
Supply voltage rejection	SVR			30		$\mu\text{V/V}$
Limiting current	I_{SC}			1.00		A

Sample Application Circuit



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