



# LA6500

## Power Operational Amplifier

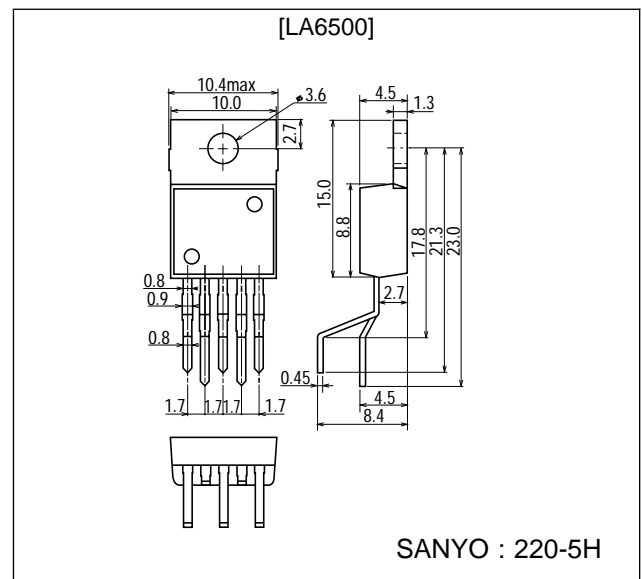
### Features

- 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

3079-220-5H



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC}/V_{EE}$		$\pm 18$	V
Differential input voltage	$V_{IDif}$		30	V
Common-mode input voltage	$V_{ICOM}$		$\pm 15$	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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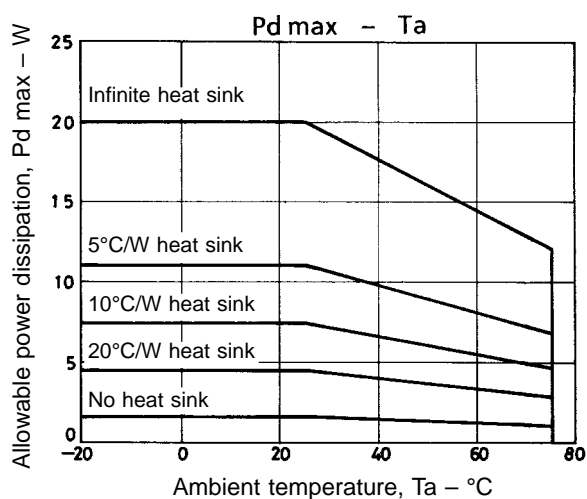
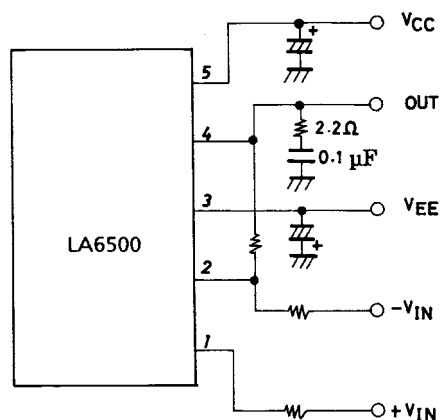
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Operating Characteristics at  $T_a = 25^\circ\text{C}$ ,  $V_{CC}/V_{EE} = \pm 15\text{ V}$

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	$V_o$	$R_L = 33\ \Omega$		$\pm 13$		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/ $\mu\text{s}$
Equivalent input noise voltage	$V_{NI}$	$R_g = 1\text{ k}\Omega$ , DIN Audio		2		$\mu\text{V}$
Supply voltage rejection	SVR			30		$\mu\text{V/V}$
Limiting current	$I_{SC}$			1.00		A

## Sample Application Circuit



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