



LA6510

1A Power Operational Amplifier

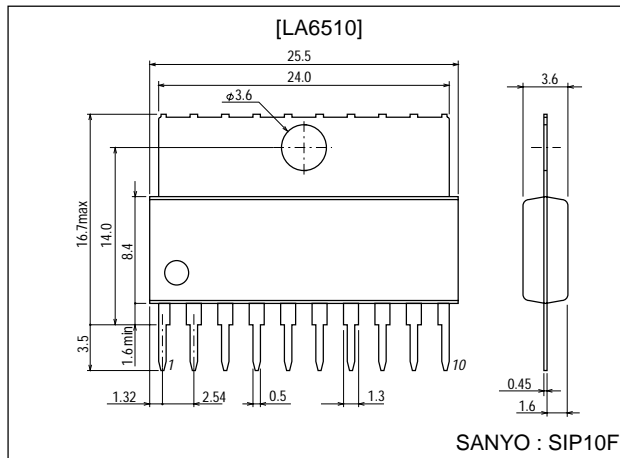
Features

- High output current ($I_O \text{ max}=1.0\text{A}$).
- High gain.
- Equipped with current limiter pin (Adjustable by external settings).
- Supports single power source operation.

Package Dimensions

unit:mm

3046B-SIP10F



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC/V_{EE}}^{\max}$		± 18	V
Differential input voltage	V_{ID}		30	V
Common mode input voltage	V_{ICOM}		± 15	V
Maximum output current	I_O^{\max}		1.0	A
Allowable power dissipation	P_d^{\max}		2.5	W
Operating temperature	T_{opr}		-20 to $+75$	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-55 to $+150$	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
No-load current drain	I_{CCO}			12	20	mA
Input offset voltage	V_{IO}	$R_S \leq 10k\Omega$		2	6	mV
Input offset current	I_{IO}			10	200	nA
Input bias current	I_B			100	700	nA
Common mode input voltage range	V_{ICM}		-15		+13	V
Common mode signal rejection ratio	C_{RM}		70	80		dB
Maximum output voltage	$V_{O \text{ max}}$	$R_L = 33\Omega$	± 12	± 13		V
Voltage gain	V_{G_O}			100		dB

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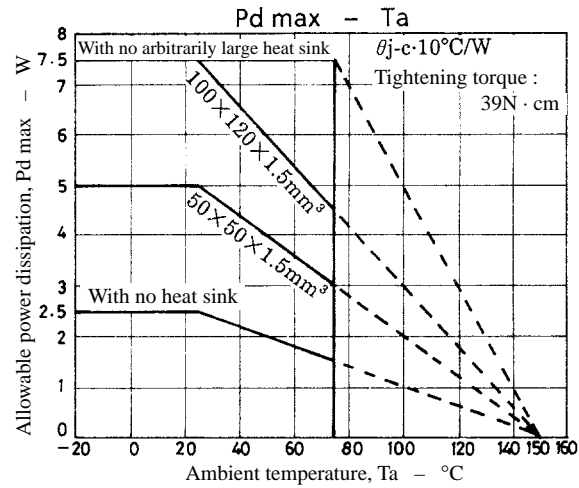
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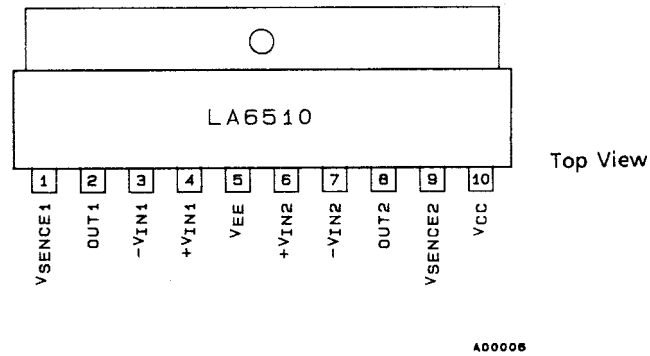
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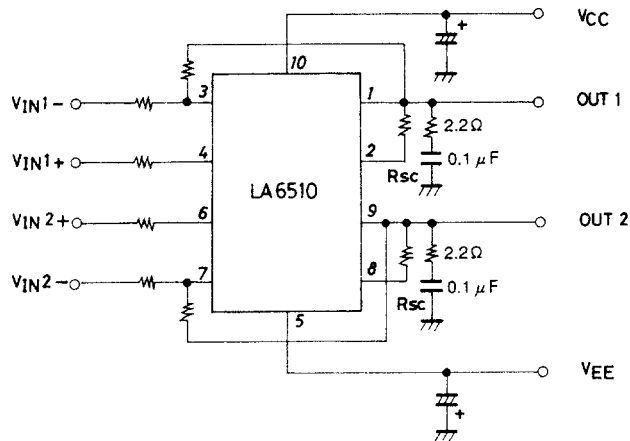
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Slew rate	SR	$G_V=0$, $R_L=33\Omega$, $R=2.2\Omega$, $C=0.1\mu F$		0.15		V/ μs
Equivalent input noise voltage	V_{NI}	$R_g=1k\Omega$, DIN AUDIO		2		μV
Supply voltage rejection ratio	SVRR			30	150	$\mu V/V$
Limiting current	I_{SC}	$R_{SC}=2.2\Omega$		0.35		A



Pin Assignment



Sample Application Circuit



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