Ordering number:ENN2624B

Monolithic Linear IC

LA6510

1A Power Operational Amplifier

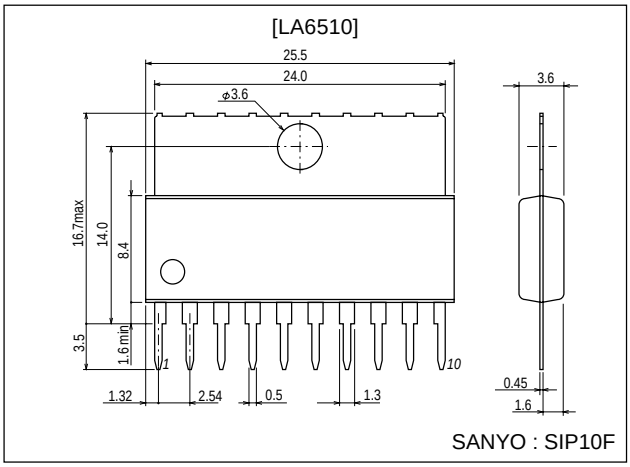
Features

- High output current (I_O max=1.0A).
- 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 Ta = 25˚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	Pd max		2.5	W
Operating temperature	Topr		–20 to +75	˚C
Storage temperature	Tstg		–55 to +150	˚C

Operating Characteristics at Ta = 25˚C, V_{CC}/V_{EE}=±15V

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
No-load current drain	I_{CCO}			12	20	mA
Input offset voltage	V_{IO}	R_S≤10kΩ		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 max	R_L=33Ω	±12	±13		V
Voltage gain	VG_O			100		dB

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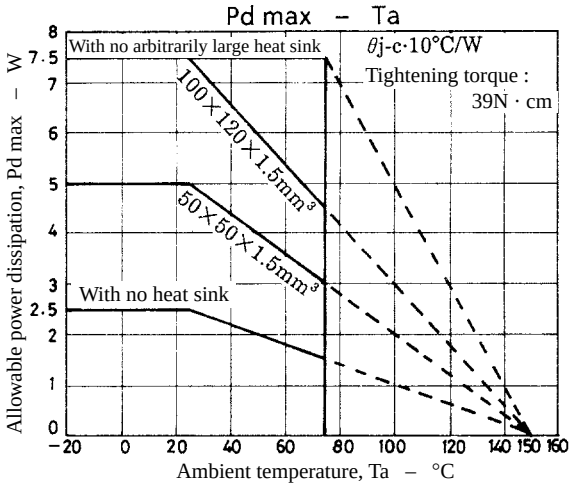
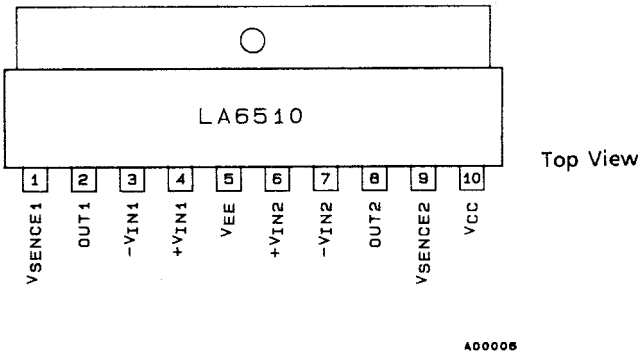
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Slew rate	SR	G_V=0, R_L=33Ω, R=2.2Ω, C=0.1μF		0.15		V/μs
Equivalent input noise voltage	V_{NI}	Rg=1kΩ, DIN AUDIO		2		μV
Supply voltage rejection ratio	SVRR			30	150	μV/V
Limiting current	I_{SC}	R_{SC}=2.2Ω		0.35		A



Pin Assignment



Sample Application Circuit