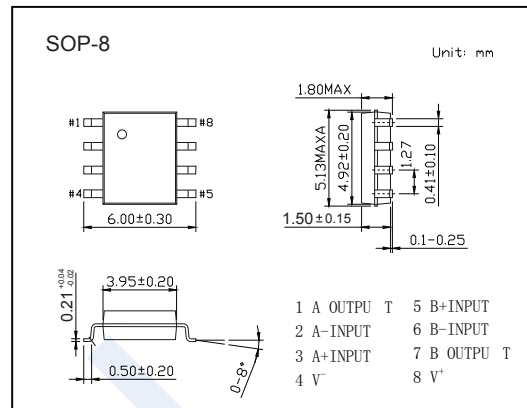
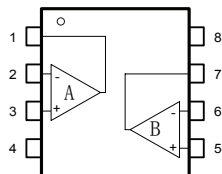


Dual Operational Amplifier

NJM4558 (KJM4558)

■ Features

- High Voltage Gain :100dB typ.
- High Input Resistance: 5MΩ typ.
- Bipolar Technology

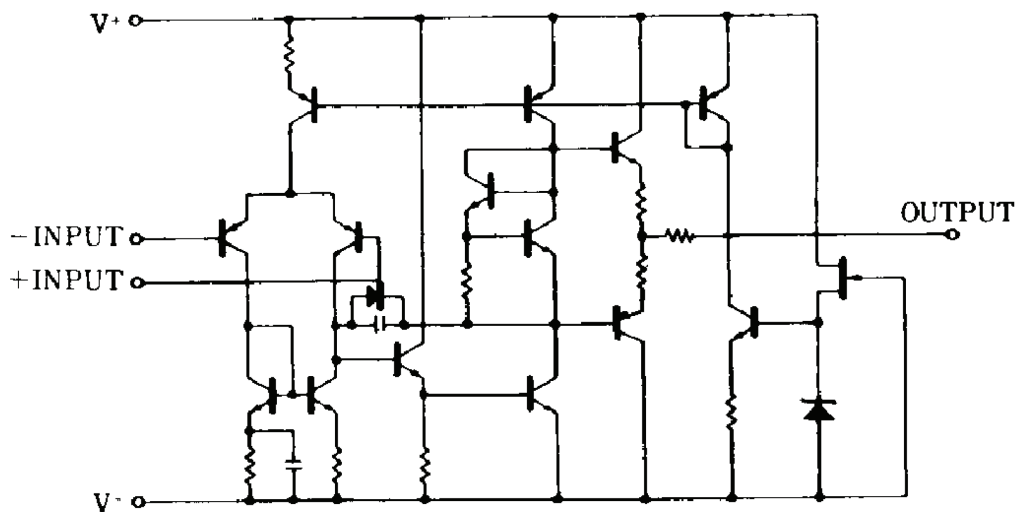


■ Absolute Maximum Ratings $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Supply Voltage	$V+/V-$	± 18	V
Differential Input Voltage	V_{ID}	± 30	V
Input Voltage	V_{IC}	$\pm 15^*$	V
Power Dissipation	P_D	300	mW
Operating Temperature Range	T_{opr}	-40 to +85	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^\circ\text{C}$

* For supply voltage less than $\pm 15\text{V}$, the absolute maximum input voltage is equal to the supply voltage.

■ Equivalent Circuit



NJM4558 (KJM4558)■ Electrical Characteristics $T_a = 25^\circ\text{C}$, $V^+V^- = \pm 15\text{V}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input Offset Voltage	V_{IO}	$R_s \leq 10\text{K}\Omega$		0.5	6	mV
Input Offset Current	I_{IO}			5	200	nA
Input Bias Current	I_B			50	500	nA
Input Resistance	R_{IN}		0.3	5		$\text{M}\Omega$
Large Signal Voltage Gain	A_v	$R_L \geq 2\text{K}\Omega$, $V_o = \pm 10\text{V}$	86	100		dB
Maximum Output Voltage Swing 1	V_{OM1}	$R_L \geq 10\text{K}\Omega$	± 12	± 14		v
Maximum Output Voltage Swing 2	V_{OM2}	$R_L \geq 2\text{K}\Omega$	± 10	± 13		v
Input Common Mode Voltage Range	V_{ICM}		± 12	14		v
Common Mode Rejection Ratio	CMR	$R_s \leq 10\text{K}\Omega$	70	90		dB
Supply Voltage Rejection Ratio	SVR	$R_s \leq 10\text{K}\Omega$	76.5	90		dB
Operating Current	I_{CC}			3.5	5.7	mA
Slew Rate	SR			1		V/ μs
Equivalent Input Noise Voltage	V_{NI}	RIAA, $R_s = 1\text{K}\Omega$, 30kHz		1.4		μV_{rms}
Gain Bandwidth Product	GB			3		MHz