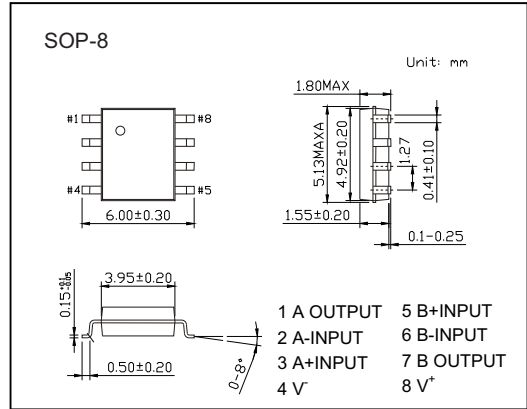
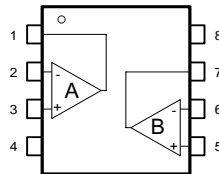


## Dual Operational Amplifier NJM4558

### Features

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

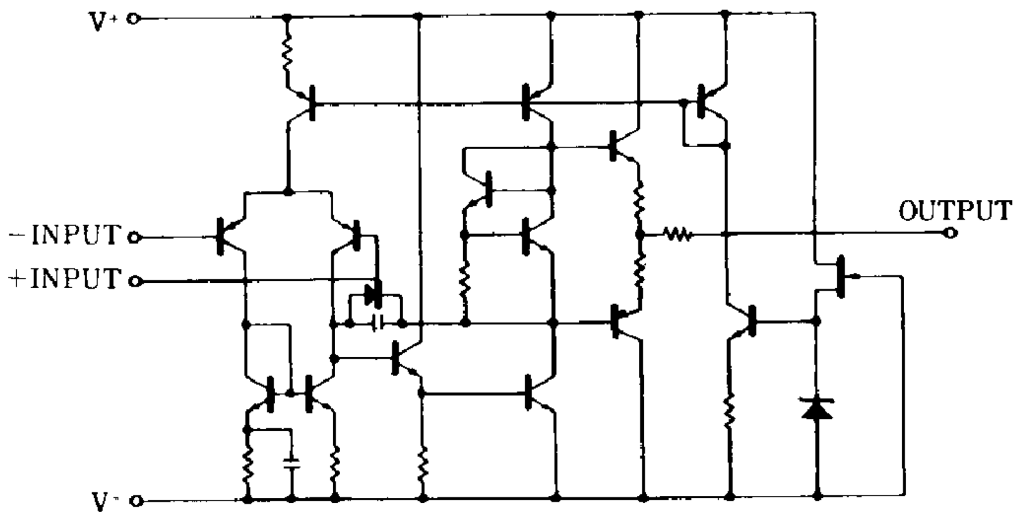


### Absolute Maximum Ratings Ta = 25

Parameter	Symbol	Rating	Unit
Supply Voltage	V <sup>+</sup> /V <sup>-</sup>	± 18	V
Differential Input Voltage	V <sub>ID</sub>	± 30	V
Input Voltage	V <sub>IC</sub>	± 15 *	V
Power Dissipation	P <sub>D</sub>	300	mW
Operating Temperature Range	T <sub>opr</sub>	-20 to +85	
Storage Temperature Range	T <sub>stg</sub>	-40 to +125	

\* For supply voltage less than ±15V, the absolute maximum input voltage is equal to the supply voltage.

### Equivalent Circuit



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

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Input Offset Voltage	$V_{IO}$	$R_s = 10\text{K}$		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		M
Large Signal Voltage Gain	$A_v$	$R_L = 2\text{K}$ , $V_o = \pm 10\text{V}$	86	100		dB
Maximum Output Voltage Swing 1	$V_{OM1}$	$R_L = 10\text{K}$	$\pm 12$	$\pm 14$		v
Maximum Output Voltage Swing 2	$V_{OM2}$	$R_L = 2\text{K}$	$\pm 10$	$\pm 13$		v
Input Common Mode Voltage Range	$V_{ICM}$		$\pm 12$	14		v
Common Mode Rejection Ratio	CMR	$R_s = 10\text{K}$	70	90		dB
Supply Voltage Rejection Ratio	SVR	$R_s = 10\text{K}$	76.5	90		dB
Operating Current	$I_{CC}$			3.5	5.7	mA
Slew Rate	SR			1		V/ $\mu\text{S}$
Equivalent Input Noise Voltage	$V_{NI}$	RIAA, $R_s = 1\text{K}$ , 30kHz		1.4		$\mu\text{Vms}$