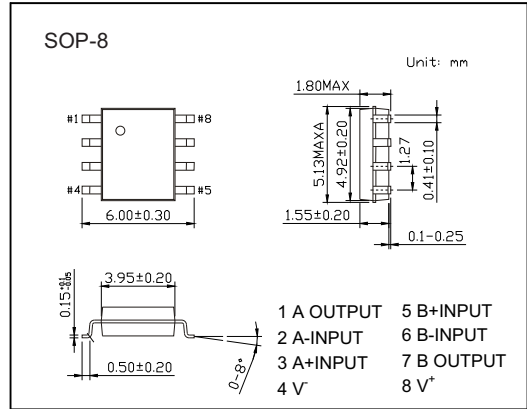
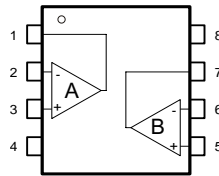


Dual Operational Amplifier NJM4558

Features

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

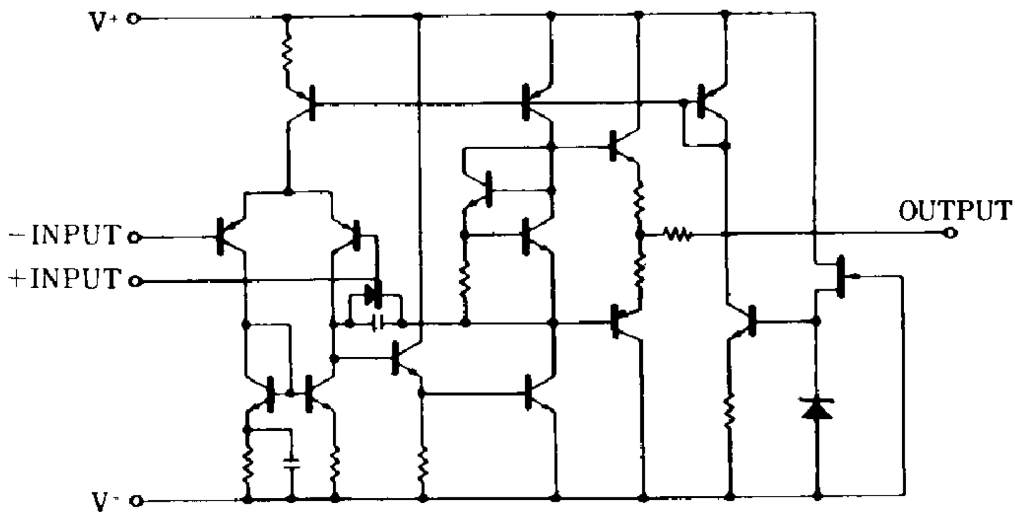


Absolute Maximum Ratings Ta = 25

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

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

Equivalent Circuit



NJM4558Electrical 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}	$R_L = 10\text{K}$	± 12	± 14		v
Maximum Output Voltage Swing 2	V_{OM2}	$R_L = 2\text{K}$	± 10	± 13		v
Input Common Mode Voltage Range	V_{ICM}		± 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/ μS
Equivalent Input Noise Voltage	V_{NI}	RIAA, $R_s = 1\text{K}$, 30kHz		1.4		μVms