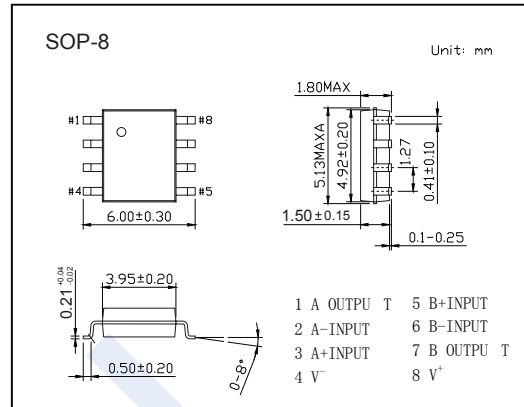
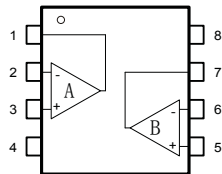


## Dual Operational Amplifier KM4558

### ■ Features

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

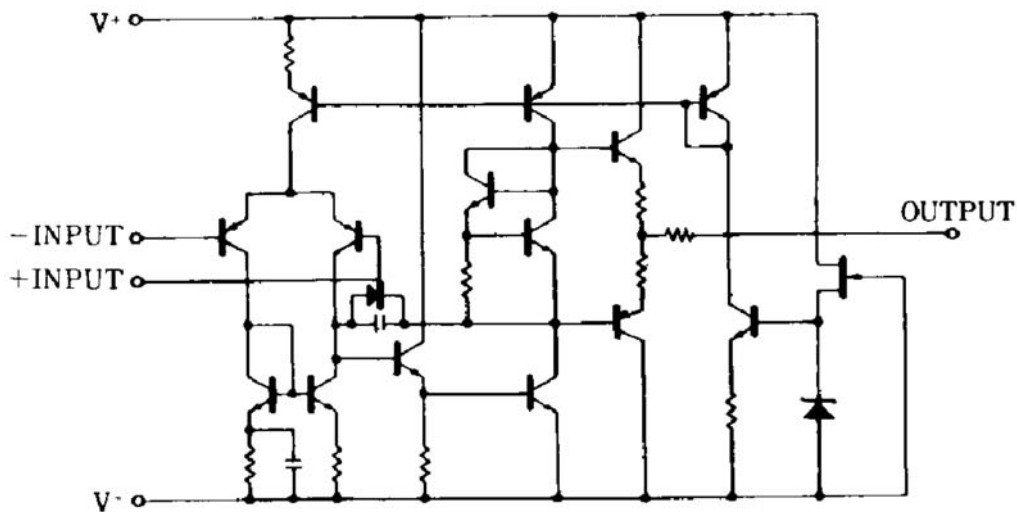


### ■ Absolute Maximum Ratings Ta = 25 C

Parameter	Symbol	Rating	Unit
Supply Voltage	V+/V-	±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>	-40 to +85	°C
Storage Temperature Range	T <sub>stg</sub>	-40 to +125	°C

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

### ■ Equivalent Circuit



## KM4558

■ 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		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	$V_{OM1}$	$R_L \geq 10\text{K}\Omega$	$\pm 12$	$\pm 14$		v
Maximum Output Voltage Swing 2	$V_{OM2}$	$R_L \geq 2\text{K}\Omega$	$\pm 10$	$\pm 13$		v
Input Common Mode Voltage Range	$V_{ICM}$		$\pm 12$	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/ $\mu\text{s}$
Equivalent Input Noise Voltage	$V_{NI}$	RIAA, $R_s = 1\text{K}\Omega$ , 30kHz		1.4		$\mu\text{V}_{rms}$
Gain Bandwidth Product	GB			3		MHz

## ■ Marking

Marking	4558
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