

NJM072B/082B, 072/082

The NJM072B/082B & NJM072/082 are dual JFET input operational amplifiers. They feature low input bias and offset currents, high input impedance and fast slew rate. The low harmonic distortion and low noise make them ideally suit for amplifiers with high fidelity and audio amplifier applications.

The NJM072/082 may cause oscillation in some application like voltage follower.

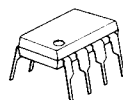
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■ Absolute Maximum Ratings (Ta=25°C)

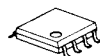
Supply Voltage	V^+/V^-	$\pm 18V$
Input Voltage (note 1)	V_i	$\pm 15V$
Differential Input Voltage	V_{ID}	$\pm 30V$
Power Dissipation	P_D (D-Type)	500mW
	(M,E-Type)	300mW
	(L-Type)	800mW
Operating Temperature Range	T_{opr}	$-20 \sim +75^\circ C$
Storage Temperature Range	T_{stg}	$-40 \sim +125^\circ C$

(note 1) For supply voltages less than $\pm 15V$, the absolute maximum input voltage is equal to the supply voltage.

Package Outline



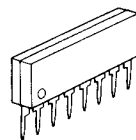
NJM072BD/082BD
NJM072D/082D



NJM072BM/082BM
NJM072M/082M



NJM072BE/082BE



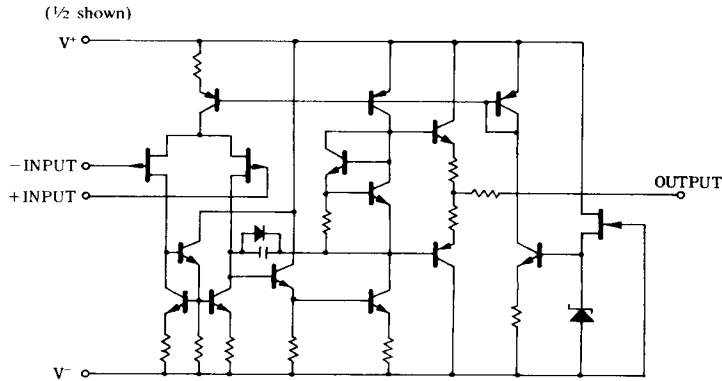
NJM072BL/082BL
NJM072L/082L

■ Electrical Characteristics (Ta=25°C, $V^+/V^- = \pm 15V$)

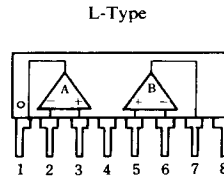
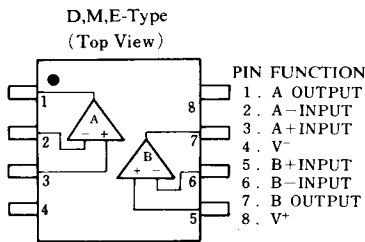
() Applies to NJM082B, NJM082

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input Offset Voltage	V_{IO}	$R_S = 50\Omega$	—	3(5)	10(15)	mV
Input Offset Current	I_{IO}		—	5	50(200)	pA
Input Bias Current	I_B		—	30	200(400)	pA
Input Common Mode Voltage Range	V_{ICM}		± 10	—	—	V
Maximum Peak-to-peak Output Voltage Swing	V_{OPP}	$R_L = 10k\Omega$	24	27	—	V_{D-P}
Large-Signal Voltage Gain	A_V	$R_L \geq 2k\Omega, V_O = \pm 10V$	88	106	—	dB
Unity Gain Bandwidth	f_T	072B/082B	—	3	—	MHz
		072/082	—	5	—	MHz
Input Resistance	R_{IN}		—	10^{12}	—	Ω
Common Mode Rejection Ratio	CMR	$R_S \leq 10k\Omega$	70	76	—	dB
Supply Voltage Rejection Ratio	SVR	$R_S \leq 10k\Omega$	70	76	—	dB
Supply Current	I_{CC}		—	3	5(5.6)	mA
Slew Rate	SR	072B/082B	—	13	—	V/ μs
		072/082	—	20	—	V/ μs
Equivalent Input Noise Voltage	V_{NI}	$R_S = 100\Omega, B.W. = 10 \sim 10kHz$	—	4	—	μV_{rms}

■ Equivalent Circuit



■ Connection Diagram



■ Typical Characteristics

