

NJM4556

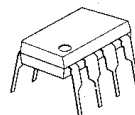
The 4556 integrated circuit is a high-gain, high output current dual operational amplifier capable of driving $\pm 70\text{mA}$ into 150Ω loads ($\pm 10.5\text{V}$ output voltage). The 4556 combines many of the features of the popular 4558 as well as having the capability of driving 150Ω loads. In addition, the wide band-width, low noise, high slew rate and low distortion of the 4556 make it ideal for many audio, telecommunications and instrumentation applications.

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

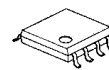
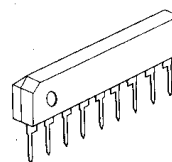
Supply Voltage	V^+/V^-	$\pm 18\text{V}$
Differential Input Voltage	V_{ID}	$\pm 30\text{V}$
Input Voltage(note)	V_I	$\pm 15\text{V}$
Power Dissipation	P_D (D,S-Type)	700mW
	(M,E-Type)	300mW
Operating Temperature Range	T_{opr}	$-20\sim+75^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-40\sim+125^\circ\text{C}$

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

Package Outline



NJM4556D

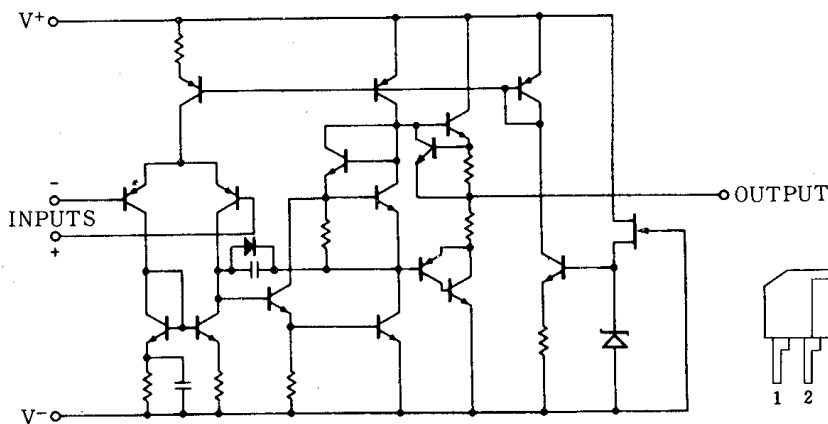
NJM4556M
NJM4556E

NJM4556S

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

Parameter	Symbol	Test Condition	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	± 60	nA
Input Bias Current	I_{IB}		—	180	500	nA
Input Resistance	R_{IN}		0.3	5	—	M Ω
Large Signal Voltage Gain	A_V	$R_L \geq 2\text{k}\Omega$, $V_O = \pm 10\text{V}$	20	100	—	$\times 10^3$
Maximum Output Voltage Swing 1	V_{OM1}	$R_L \geq 2\text{k}\Omega$	± 12	± 13.5	—	V
Maximum Output Voltage Swing 2	V_{OM2}	$R_L \geq 150\Omega$	± 10.5	± 11	—	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	$R_S \leq 10\text{k}\Omega$	—	30	150	$\mu\text{V/V}$
Power Dissipation	P_D		—	270	360	mW
Slew Rate	SR		—	3	—	V/ μs
Unity Gain Bandwidth	f_T		—	8	—	MHz

Equivalent Circuit (1/2 Shown)



Connection Diagram

