

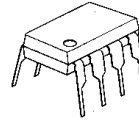
NJM3415

The NJM3415 integrated circuit is a high gain, high output current, high output voltage swing dual operational amplifier capable of driving 70mA.

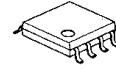
Absolute Maximum Ratings (Ta=25°C)

Supply Voltage	V ⁺	15V (or ±7.5V)
Differential Input Voltage	V _{ID}	15V
Input Voltage	V _I	-0.3~15V
Power Dissipation	P _D (D,S-Type)	500mW
	(M,E-Type)	300mW
Operating Temperature Range	T _{opr}	-20~+75°C
Storage Temperature Range	T _{stg}	-40~+125°C

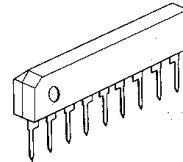
Package Outline



NJM3415D



NJM3415M
NJM3415E

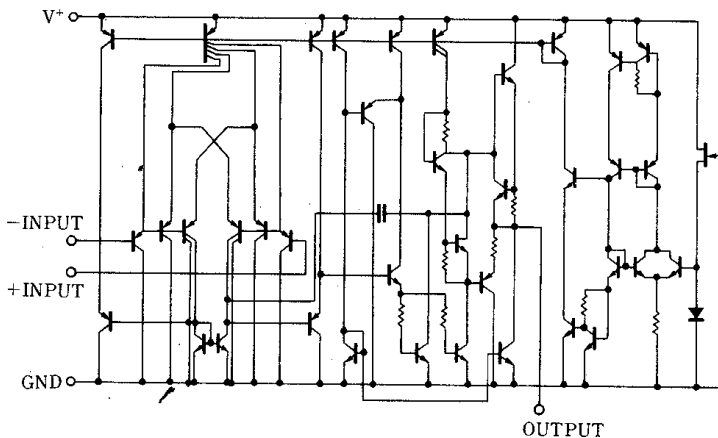


NJM3415S

Electrical Characteristics (Ta=25°C, V⁺=8.6V)

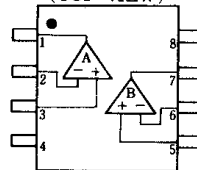
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input Offset Voltage	V _{IO}	R _S =0Ω	—	2	5	mV
Input Offset Current	I _{IO}		—	±30	±100	nA
Input Bias Current	I _{IB}		—	100	500	nA
Large Signal Voltage Gain	A _V	R _L =2kΩ	25	100	—	V/mA
Input Common Mode Voltage Range	V _{ICM}		V ⁺ -2	—	—	V
Maximum Output Voltage Swing I	V _{OM I}	R _L ≥2kΩ, V ⁺ =5V	3.5	—	—	V
Maximum Output Voltage Swing II	V _{OM II}	I _O =70mA, V ⁺ =5V	3.2	—	—	V
Common Mode Rejection Ratio	CMR		80	90	—	dB
Supply Voltage Rejection Ratio	SVR		80	90	—	dB
Quiescent Current	I _Q	R _L =∞	4.5	5.5	7.0	mA
Slew Rate	SR	A _V =1	—	1.0	—	V/μS
Unity Gain Bandwidth	f _T		—	1.3	—	MHz
Operating Voltage Range	V ⁺		—	—	10	V

Equivalent Circuit (1/2 Shown)



Connection Diagrams

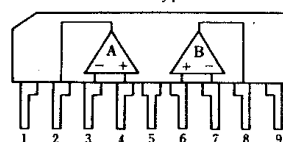
D.M.E Type
(TOP VIEW)



PIN FUNCTION

1. OUTPUT
2. A-INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V⁺

S Type



PIN FUNCTION

1. V⁺
2. A OUTPUT
3. A-INPUT
4. A+INPUT
5. GND
6. B+INPUT
7. B-INPUT
8. B OUTPUT
9. V⁺