

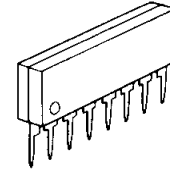
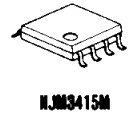
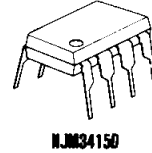
NJM3415

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 ⁺ (V ⁺ /V ⁻)	15V (or ±7.5V)
Differential Input Voltage	V _{ID}	15V
Input Voltage	V _I	-0.3 ~ +15V
Power Dissipation	P _D (D-Type)	500mW
	(M-Type)	300mW
	(L-Type)	800mW
Operating Temperature Range	T _{opr}	-20 ~ +75°C
Storage Temperature Range	T _{stg}	-40 ~ +125°C

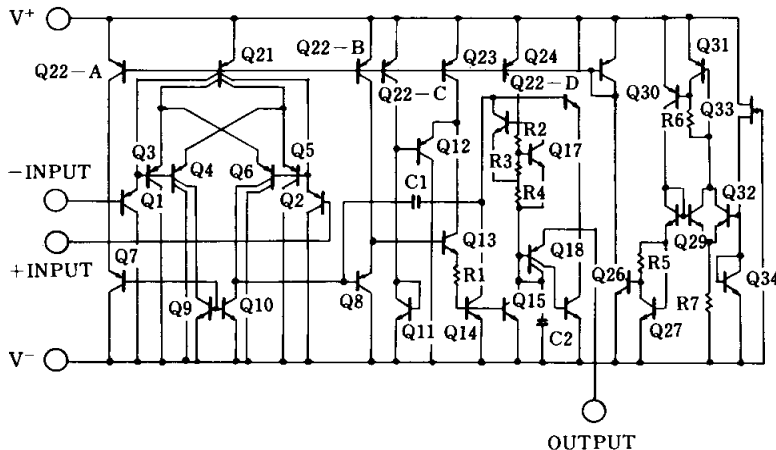
Package Outline



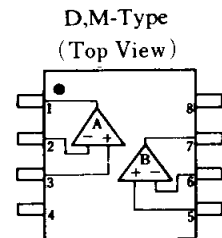
Electrical Characteristics (Ta=25°C, V⁺=8.6V)

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 _B		—	100	500	nA
Large Signal Voltage Gain	A _V	R _L =2kΩ	88	100	—	dB
Input Common Mode Voltage Range	V _{ICM}		V ⁺ -2	—	—	V
Maximum Output Voltage Swing 1	V _{OM1}	R _L ≥2kΩ, V ⁺ =5V	3.5	—	—	V
Maximum Output Voltage Swing 2	V _{OM2}	I _O =70mA, V ⁺ =5V	3.2	—	—	V
Common Mode Rejection Ratio	CMR		80	90	—	dB
Supply Voltage Rejection Ratio	SVR		80	90	—	dB
Supply Current	I _{CC}	R _L =∞	4.5	5.5	7.0	mA
Slew Rate	SR		—	1.0	—	V/μS
Unity Gain Bandwidth	GB		—	1.3	—	MHz
Operating Voltage Range	V ⁺		—	—	10	V

Equivalent Circuit (1/2 Shown)

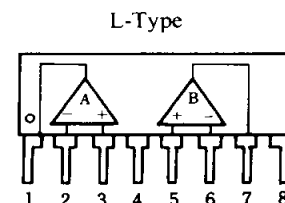


Connection Diagrams



PIN FUNCTION

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

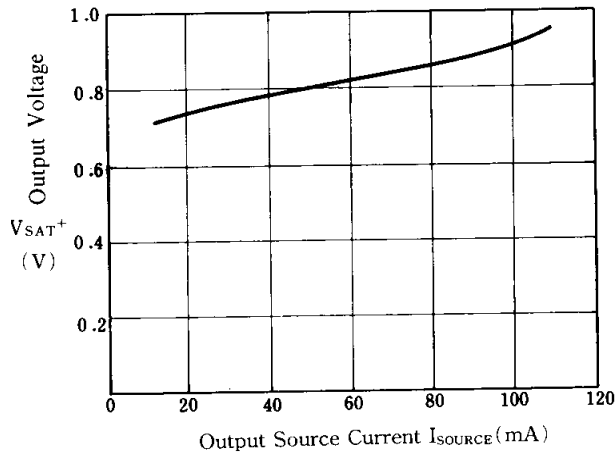


■ Typical Characteristics

2

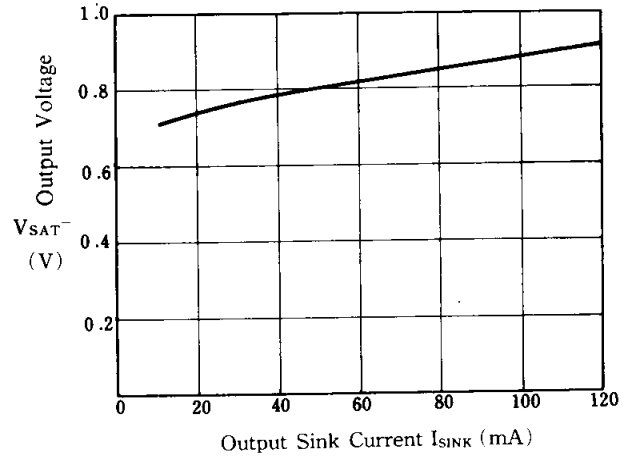
V_{sat}⁺ vs. Output Source Current

(V⁺ = +5 V, T_a = 25°C)



V_{sat}⁻ vs. Output Sink Current

(V⁺ = +5 V, T_a = 25°C)



Supply Current vs. Supply Voltage

(T_a = 25°C)

