Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

QUAD J-FET INPUT OPERATIONAL AMPLIFIER

■ GENERAL DESCRIPTION

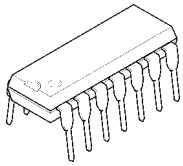
The NJM074/084 are quad JFET input operational amplifiers.

The NJM074/084 have the same electrical characteristics of NJM072B/082B except supply current.

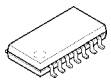
■ FEATURES

- Operating Voltage (±4V~±18V)
- J-FET Input
- High Input Resistance ($10^{12}\Omega$ typ.)
- Low Input Bias Current (30pA typ.)
- High Slew Rate (13V/μs typ.)
- Wide Unity Gain Bandwidth (3MHz typ.)
- Package Outline DIP14,DMP14,SSOP14
- Bipolar Technology

■ PACKAGE OUTLINE



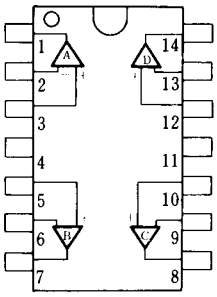
NJM074D
NJM084D



NJM074M
NJM084M

NJM074V
NJM084V

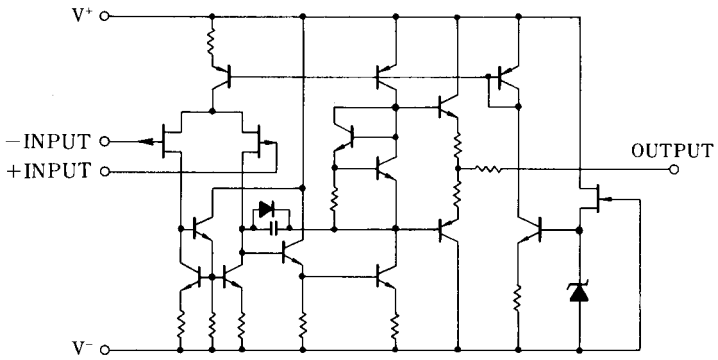
■ PIN CONFIGURATION



NJM074D/084D
NJM074M/084M
NJM074V/084V

PIN FUNCTION
1. A OUTPUT
2. A -INPUT
3. A +INPUT
4. V^+
5. B +INPUT
6. B -INPUT
7. B OUTPUT
8. C OUTPUT
9. C –INPUT
10.C +INPUT
11.V^-
12.D +INPUT
13.D –INPUT
14.D OUTPUT

■ EQUIVALENT CIRCUIT (1/4 Shown)



■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V^+/V^-	± 18	V
Differential Input Voltage	V_{ID}	± 30	V
Input Voltage	V_{IC}	± 15 (note1)	V
Power Dissipation	P_D	(DIP14) 700 (DMP14) 700 (note2) (SSOP14) 300	mW
Operating Temperature Range	T_{opr}	-40~+85	°C
Storage Temperature Range	T_{stg}	-40~+125	°C

(note1) For supply voltage less than ±15V. the absolute maximum input voltage is equal to the supply voltage.
(note2) At on PC board

■ ELECTRICAL CHARACTERISTICS (Ta=+25°C, V^+/V^-=±15V)

( ) Applies to NJM084

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	R_S=50Ω	-	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=10kΩ	24	27	-	V_{P-P}
Large-Signal Voltage Gain	A_V	R_L≥2kΩ, V_O=±10V	88	106	-	dB
Unity Gain Bandwidth	f_T		-	3	-	MHz
Input Resistance	R_{IN}		-	10^{12}	-	Ω
Common Mode Rejection Ratio	CMR	R_S≤10kΩ	70	76	-	dB
Supply Voltage Rejection Ratio	SVR	R_S≤10kΩ	70	76	-	dB
Operating Current	I_{CC}		-	6	10(11.2)	mA
Slew Rate	SR		-	13	-	V/μs
Equivalent Input Noise Voltage	V_{NI}	R_S=100Ω, B.W.=10~10kHz	-	4	-	μV_{rms}