

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)

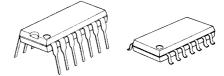
J-FET Input

High Input Resistance (10¹²Ω typ.)
 Low Input Bias Current (130pA typ.)
 High Slew Rate (13V/µs typ.)
 Wide Unity Gain Bandwidth (3MHz typ.)

Package Outline
 DIP14,DMP14,SSOP14

• Bipolar Technology

■ PACKAGE OUTLINE



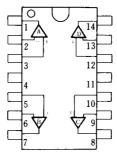
NJM074D NJM084D

NJM074M NJM084M



NJM074V NJM084V

■ PIN CONFIGURATION

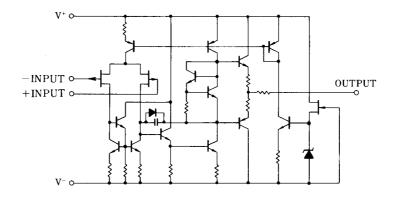


NJM074D/084D NJM074M/084M NJM074V/084V 1. A OUTPUT
2. A -INPUT
3. A +INPUT
4. V[†]
5. B +INPUT
6. B -INPUT
7. B OUTPUT
8. C OUTPUT
9. C -INPUT
10.C +INPUT

PIN FUNCTION

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}	-20~+75	°C
Storage Temperature Range	T _{stg}	-40~+125	°C

(note1) For supply voltage less than $\pm 15 V$. 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)	pА
Input Bias Current	I_{B}		-	30	200(400)	рA
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	Icc		-	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_{ms}

[CAUTION]

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