

## ■ Bipolar

Power Supply	Circuit	Functions	Type No.	PKG	Recommended Supply Voltage	V <sub>IO</sub> typ. (mV)	I <sub>IO</sub> typ. (nA)	I <sub>cc</sub> typ. (mA)	G.B. typ. (MHz)	S.R. typ. (V/μs)	Noise typ.
Single Supply Type	Single	General	NJM2125F	MTP-5	+2.7~+20	2	5	1.0	1.2/f <sub>r</sub>	1.2	
	Dual	General	NJM2904D/M/V/L	DIP/DMP/SSOP/SIP-8	+3~+32	2	5	0.7	0.6	0.5	
		Low Distortion	NJM3404AD/M/V/L	DIP/DMP/SSOP/SIP-8	+4~+36	2	5	2.0	1.2/f <sub>r</sub>	1.2	
		High Output	NJM3414AD/M/V/L	DIP/DMP/SSOP/SIP-8	+3~+15	2	5	4.0	1.3	1.0	
		Low Power	NJM2132D/M/V/L	DIP/DMP/SSOP/SIP-8	+2.7~+32	2	5	0.44	1.8	2.1	32nV/√Hz(en)
		Precision	NJM2119D/M	DIP/DMP-8	+4~+36	0.09	0.3	1.0	1.0	0.3	
	Quad	General	NJM324D/M/V	DIP/DMP/SSOP-14	+3~+32	2	5	0.7	—	—	
			NJM2902N/M/V	DIP/DMP/SSOP-14	+3~+32	2	5	1.0	0.5	0.5	
		Low Distortion	NJM3403AD/M/V	DIP/DMP/SSOP-14	+4~+36	2	5	3.0	1.2/f <sub>r</sub>	1.2	
	Single	General	NJM741D/M/V	DIP/DMP/SSOP-8	±3~±18	2	5	1.7	—	0.5	
Precision		NJMOP-07D/M	DIP/DMP-8	±3~±22	0.06	0.8	2.7	—	0.17		
High Speed		NJM318D/M	DIP/DMP-8	±5~±20	4	30	5.0	1.5	70		
Low Power		NJM4250D/M/V	DIP/DMP/SSOP-8	±1~±18	6max	20max	0.1max	—	—		
		NJM2130F	MTP5	±2~±18	1	1	80	—	0.5	50nV/√Hz(en)	
Low Noise		NJM5534D/M	DIP/DMP-8	±3~±22	0.5	20	4.0	10	13	3.3nV/√Hz(en)	
Low Vosat		NJM2107F	MTP-5	±1~±3.5	1	5	2.0	—	3.0		
High Speed Wide Band		NJM2136D/M/V	DIP/DMP/SSOP-8	±1.35~±6	5	20	0.63	200	45		
Switch Type (2-in, 1-out×1)		NJM2120D/M/L	DIP/DMP/SIP-8	±2.5~±18	0.8	—	2.3	7.0/f <sub>r</sub>	2.2		
		NJM2121D/M/L	DIP/DMP/SIP-8	±2.5~±18	0.8	—	2.3	14/f <sub>r</sub>	4.0		
Dual Supply Type	General	NJM1458D/M	DIP/DMP-8	±3~±18	2	5	3.3	—	0.5		
		NJM4558D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.5	5	3.5	3.0	1.0		
		NJM4559D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.5	5	3.5	6.0	2.0		
	Low Power	NJM022D/M/V/L	DIP/DMP/SSOP/SIP-8	±2~±18	1	1	0.13	—	0.5		
		NJM022BD/M/V/L	DIP/DMP/SSOP/SIP-8	±2~±18	1	1	0.25	—	1.0		
	High Voltage	NJM2147D/M	DIP/DMP-8	±8~±28	1.0	1	0.175	—	0.5	50nV/√Hz(en)	
	Wide Band	NJM2041D/M/L	DIP/DMP/SIP-8	±4~±22	0.3	10	6.0	7.0	3.0	0.48μV(VNI)	
		NJM2043D/M/L	DIP/DMP/SIP-8	±4~±22	0.3	10	6.0	14	6.0	0.4μV(VNI)	
		NJM2068D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.3	5	5.0	27	6.0	0.44μV(VNI)	
		NJM4560D/M/L	DIP/DMP/SIP-8	±4~±18	0.5	5	4.3	10	4.0	1.2μV(VNI)	
		NJM4565D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.5	2	4.5	10	4.0	1.2μV(VNI)	
		NJM5532D/M/L	DIP/DMP/SIP-8	±3~±22	0.5	10	9.0	10	8.0	5nV/√Hz(en)	
	FET Input	NJM062D/M/V/L	DIP/DMP/SSOP/SIP-8	±2~±18	3	1pA	0.4	1.0/f <sub>r</sub>	3.5	35nV/√Hz(en)	
		NJM072D/M/L	DIP/DMP/SIP-8	±4~±18	3	5pA	3.0	5.0/f <sub>r</sub>	20	4.0μVms(VNI)	
		NJM072BD/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	3	5pA	3.0	3.0/f <sub>r</sub>	13	4.0μVms(VNI)	
		NJM082D/M/L	DIP/DMP/SIP-8	±4~±18	5	5pA	3.0	5.0/f <sub>r</sub>	20	4.0μVms(VNI)	
		NJM082BD/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	5	5pA	3.0	3.0/f <sub>r</sub>	13	4.0μVms(VNI)	
		NJM353D/M	DIP/DMP-8	±5~±18	5	25pA	3.6	4.0/f <sub>r</sub>	13	16nV/√Hz(en)	
		NJM2082D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	2	5pA	4.0	5.0	20	1.6μV(VNI)	
		NJM2162D/M/V/L	DIP/DMP/SSOP/SIP-8	±3~±18	5.0	1pA	1.0	3.0/f <sub>r</sub>	10		
Low Noise	NJM2041D/M/L	DIP/DMP/SIP-8	±4~±22	0.3	10	6.0	7.0	3.0	0.48μV(VNI)		
	NJM2043D/M/L	DIP/DMP/SIP-8	±4~±22	0.3	10	6.0	14	6.0	0.4μV(VNI)		
	NJM2068D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.3	5	5.0	27	6.0	0.44μV(VNI)		
	NJM2122D/M	DIP/DMP-8	±2~±10	1.0	450	7.0	12	2.4	1.5nV/√Hz(en)		
	NJM4560D/M/L	DIP/DMP/SIP-8	±4~±18	0.5	5	4.3	10	4.0	1.2μV(VNI)		
	NJM4562D/M/L	DIP/DMP/SIP-8	±4~±18	0.5	5	3.5	—	—	0.6μVms(VNI)		
	NJM4565D/M/V/L	DIP/DMP/SSOP/SIP-8	±4~±18	0.5	2	4.5	10	4.0	12μV(VNI)		
	NJM5532D/M/L	DIP/DMP/SSOP-8	±3~±20	0.5	10	9.0	10	8.0	5nV/√Hz(en)		

# OPERATIONAL AMPLIFIER ELECTRICAL CHARACTERISTICS TABLE

## ■ Bipolar

Power Supply	Circuit	Functions	Type No.	PKG	Recommended Supply Voltage	V <sub>IO</sub> typ. (mV)	I <sub>IO</sub> typ. (nA)	I <sub>CC</sub> typ. (mA)	G.B. typ. (MHz)	S.R. typ. (V/μS)	Noise typ.
Dual Supply Type	Dual	High Performance	NJM2114D/M/L	DIP/DMP/SIP-8	±3~±22	0.2	10	9.0	13	15	0.9μVrms(VNI)
			NJM4580D/M/V/E/L	DIP/DMP/SSOP/EMP/SIP-8	±2~±18	0.3	5	6.0	15	5.0	0.8μVrms(VNI)
		Low Vosat	NJM2100D/M/V/L	DIP/DMP/SSOP/SIP-8	±1~±3.5	1.0	100	3.5	12	4.0	
			NJM2115D/M/V/L	DIP/DMP/SSOP/SIP-8	±1~±7	1.0	100	3.5	12	4.0	
		High Output Current	NJM4556AD/M/L/V	DIP/DMP/SIP/SSOP-8	±2~±18	0.5	5	8/9	8.0	3.0	
		High Speed Wide Band	NJM2137D/M/V	DIP/DMP/SSOP-8	±1.35~±6	5	20	1.14	200	45	
	Switch Type (2-in, 1-out×2)	NJM2123D/M/V	DIP/DMP/SSOP-16	+3.6~+20 (±1.8~±10)	1.0	10	6.0	10	3		
	Trans Conductance	NJM13600D/M/V	DIP/DMP/SSOP-14		0.4	—	2.6	—	50		
		NJM13700D/M	DIP/DMP-14		0.4	—	2.6	—	50		
	Quad	General	NJM2058D/M/V	DIP/DMP/SSOP-14	±4~±18	0.5	5	7.0	—	1.0	
			NJM2059D/M/V	DIP/DMP/SSOP-14	±4~±18	0.5	5	7.0	—	2.0	
			NJM4741D/M/V	DIP/DMP/SSOP-14	±4~±20	1.0	5	7.0max	—	1.6	
		Low Vosat	NJM2112D/M/V	DIP/DMP/SSOP-14	±1~±7	1.0	100	8.0	9	3.2	
		FET Input	NJM064D/M/V	DIP/DMP/SSOP-14	±2~±18	3.0	1pA	0.8	1.0/f <sub>T</sub>	3.5	35nV/√Hz (en)
			NJM074D/M/V	DIP/DMP/SSOP-14	±4~±18	3.0	5pA	6.0	3.0/f <sub>T</sub>	13	4.0μVrms(VNI)
			NJM084D/M/V	DIP/DMP/SSOP-14	±4~±18	5.0	5pA	6.0	3.0/f <sub>T</sub>	13	4.0μVrms(VNI)
			NJM2164D/M/V	DIP/DMP/SSOP-14	±2~±18	5.0	1	1.2	3.0/f <sub>T</sub>	10	
		High Speed Wide Band	NJM2138D/M/V	DIP/DMP/SSOP-14	±1.35~±6	5	20	2.27	200	45	
		Low Noise	NJM2060D/M/V	DIP/DMP/SSOP-14	±4~±18	0.5	5	9.0	10	4.0	1.2μVrms(VNI)
	Hex	General	NJM2097M	DMP-24	±2~±7.5	0.5	20	15	10	5.0	
		High Speed Wide Band	NJM2116V	SSOP-20	±1.35~±6	1.0	3.0	3.0	200	45	

4

# OPERATIONAL AMPLIFIER ELECTRICAL CHARACTERISTICS TABLE

## ■ C-MOS

Power Supply	Circuit	Functions	Type No.	PKG	Recommended Supply Voltage	V <sub>IO</sub> typ. (mV)	I <sub>IO</sub> typ. (pA)	I <sub>DD</sub> typ. (μA)	F <sub>t</sub> typ. (MHz)	S.R. typ. (V/μs)	Noise typ.
Single Supply Type	Single	Low Voltage Operation	NJU7001D/M/V	DIP/DMP/SSOP-8	+1 ~ +16	10	1	15	0.1	0.05	
	Dual		NJU7002D/M	DIP/DMP-8							
	Quad		NJU7004D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7021D/M/V	DIP/DMP/SSOP-8	+3 ~ +16	10	1	150	0.4	0.4	
	Dual		NJU7022D/M	DIP/DMP-8							
	Quad		NJU7024D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7031D/M/V	DIP/DMP/SSOP-8	+3 ~ +16	10	1	1000	1.5	3.5	
	Dual		NJU7032D/M	DIP/DMP-8							
	Quad		NJU7034D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7051D/M/V	DIP/DMP/SSOP-8	+1 ~ +16	2	1	15	0.1	0.05	
	Dual		NJU7052D/M	DIP/DMP-8							
	Quad		NJU7054D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7061D/M/V	DIP/DMP/SSOP-8	+3 ~ +16	2	1	150	0.4	0.4	
	Dual		NJU7062D/M	DIP/DMP-8							
	Quad		NJU7064D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7071D/M/V	DIP/DMP/SSOP-8	+3 ~ +16	2	1	300	1.0	1.6	
	Dual		NJU7072D/M	DIP/DMP-8							
	Quad		NJU7074D/M/V	DIP/DMP/SSOP-14							
	Single		NJU7011F	MTP-5	+1 ~ +5.5	10	1	15	0.2	0.1	
	Dual		NJU7014D/M/V/R	DIP/DMP/SSOP/VSP-8							
	Single		NJU7012F	MTP-5	+1 ~ +5.5	10	1	80	1.0	1.0	
	Dual		NJU7015D/M/V/R	DIP/DMP/SSOP/VSP-8							
	Single		NJU7013F	MTP-5	+1 ~ +5.5	10	1	200	1.0	2.4	
	Dual		NJU7016D/M/V/R	DIP/DMP/SSOP/VSP-8							
	Single		NJU7091AF	MTP-5	+1 ~ +5.5	2	1	15	0.2	0.1	
	Dual		NJU7094D/M/V/R	DIP/DMP/SSOP/VSP-8							
	Single		NJU7092AF	MTP-5	+1 ~ +5.5	2	1	80	1.0	1.0	
	Dual		NJU7095D/M/V/R	DIP/DMP/SSOP/VSP-8							
	Single		NJU7093AF	MTP-5	+1 ~ +5.5	2	1	200	1.0	2.4	
	Dual		NJU7096D/M/V/R	DIP/DMP/SSOP/VSP-8							