

ADJUSTABLE DIVIDED VOLTAGE GENERATOR

■ GENERAL DESCRIPTION

The NJM2366 is an adjustable divided voltage generator for medium and large size LCD panels which are required five bias voltage.

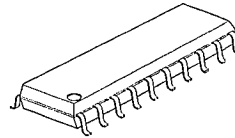
5 divided voltage are generated by internal bleeder resistor and are output through the buffer amplifier.

The minimum voltage ratio is selected from 1/13 to 1/19 of supply voltage.

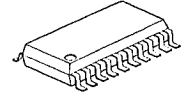
■ FEATURES

- Operating Voltage (−10V ~ −36V)
- Low Operating Current (1.5mA max.)
- Output Current (±10mA min.)
- 5 Divided Voltage From Supply Voltage
- Internal an OP-AMP
- Bipolar Technology
- Package Outline SOP20, SSOP20

■ PACKAGE OUTLINE

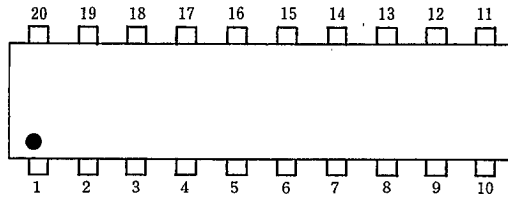


NJM2366G



NJM2366V

■ PIN CONFIGURATION

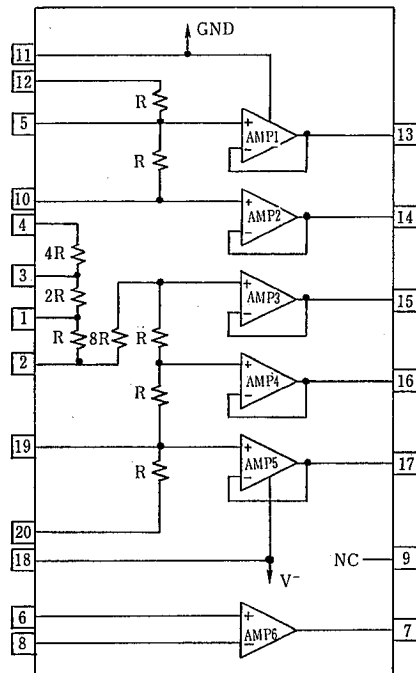


NJM2366G
NJM2366V

PIN FUNCTION

- | | |
|----------|----------|
| 1. RX3 | 11. GND |
| 2. RX4 | 12. Vin |
| 3. RX2 | 13. V1 |
| 4. RX1 | 14. V2 |
| 5. Vin1 | 15. V3 |
| 6. Vin+ | 16. V4 |
| 7. Vout | 17. V5 |
| 8. Vin | 18. V- |
| 9. NC | 19. Vin3 |
| 10. Vin2 | 20. Vref |

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁻	-40	V
Vin Voltage	V _{in}	-40	V
Output Current	I _{out}	±15	mA
Power Dissipation(G/V type)	P _D	300	mW
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature Range(G/V type)	T _{stg}	-50 ~ +125	°C

■ ELECTRICAL CHARACTERISTICS

(V⁻=-16V, Ta=25°C)

Total Device

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Operating Current	I _{cc}	V ⁻ =V _{ref} =-30V, 1/13Bias	-	-	1.5	mA
Resistance	R	IR=20 μA	15	20	25	KΩ
Internal Resistance Divided Ratio	Ra1	R/R	0.98	1.00	1.02	
	Ra2	2R/R	1.96	2.00	2.04	
	Ra3	4R/R	3.92	4.00	4.08	
	Ra4	8R/R	7.84	8.00	8.16	

Buffers Block

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Output Voltage Rating	RA1	V ⁻ =V _{ref} GND-V1 / V1-V2 -10V > V ⁻ > -30V	0.98	1.00	1.02	
	RA2	V3-V4 / V4-V5 -10V > V ⁻ > -30V	0.98	1.00	1.02	
Output Voltage Difference	DV	(A)+(B); V ⁻ =V _{ref} (A)= GND-V1 - V1-V2 (B)= V4-V5 - V3-V4	-100	0	100	mV
Load Regulation	ΔV1	V ⁻ =V _{ref} =-30V -10mA ≤ I _{out} ≤ 10mA	-20	0	20	mV
	ΔV2		-20	0	20	
	ΔV3		-20	0	20	
	ΔV4		-20	0	20	
	ΔV5		-20	0	20	
	ΔVout		-20	0	20	

■ ELECTRICAL CHARACTERISTICS

($V^- = -16V$, $T_a = 25^\circ C$)

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Output Current 1	$I_{SOURCE1}$	$V^- = V_{ref} = -30V$ $1/13Bias$	+10	—	—	mA
	$I_{SOURCE2}$		+10	—	—	
	$I_{SOURCE3}$		+10	—	—	
	$I_{SOURCE4}$		+10	—	—	
	$I_{SOURCE5}$		+10	—	—	
	$I_{SOURCE6}$		+10	—	—	
Output Current 2	I_{SINK1}	$V^- = V_{ref} = -30V$ $1/13Bias$	-10	—	—	mA
	I_{SINK2}		-10	—	—	
	I_{SINK3}		-10	—	—	
	I_{SINK4}		-10	—	—	
	I_{SINK5}		-10	—	—	
	I_{SINK6}		-10	—	—	



MEMO

[CAUTION]

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