

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.

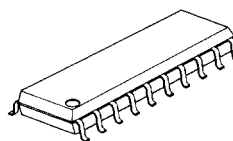
The minimum voltage ratio is selected from 1/13 to 1/19 of supply voltage.

■ FEATURES

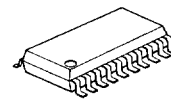
- Operating Voltage (−10V ~ −36V)
- Low Operating Current (1.5mA max.)
- Output Current ($\pm 10\text{mA}$ min.)
- 5 Divided Voltage From Supply Voltage
- Internal an OP-AMP
- Bipolar Technology
- Package Outline

SOP20, SSOP20

■ PACKAGE OUTLINE

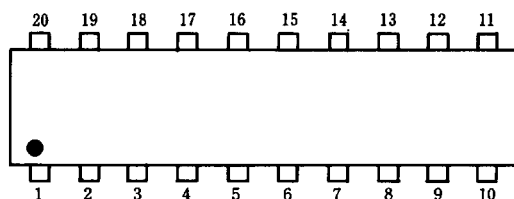


NJM2366G



NJM2366V

■ PIN CONFIGURATION

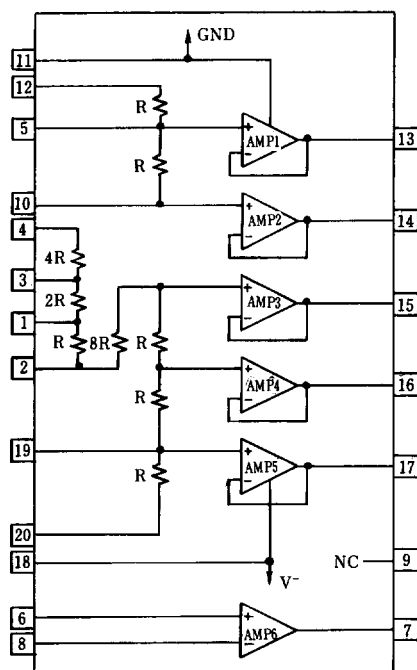


NJM2366G
NJM2366V

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	—	—	
	I_{SINK2}		-10	—	—	
	I_{SINK3}		-10	—	—	
	I_{SINK4}		-10	—	—	
	I_{SINK5}		-10	—	—	
	I_{SINK6}		-10	—	—	