

Designated client product

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New Japan Radio Co.,Ltd.

www.njr.com

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.

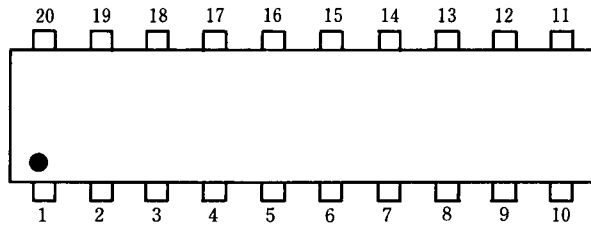
5 divided voltage are generated by internal bleeder resistor and are output through the buffer amplifier.

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

■ FEATURES

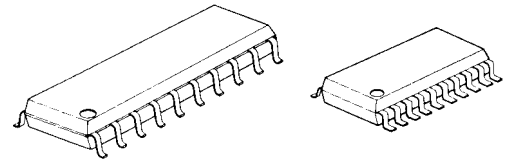
- Operating Voltage (-10V to -36V)
- Low Operating Current (1.5mA max.)
- Output Current ($\pm 10\text{mA}$ min.)
- 5 Divided Voltage From Supply Voltage
- Internal an OP-AMP
- Bipolar Technology
- Package Outline SOP20, SSOP20

■ PIN CONFIGURATION



NJM2366G
NJM2366V

■ PACKAGE OUTLINE



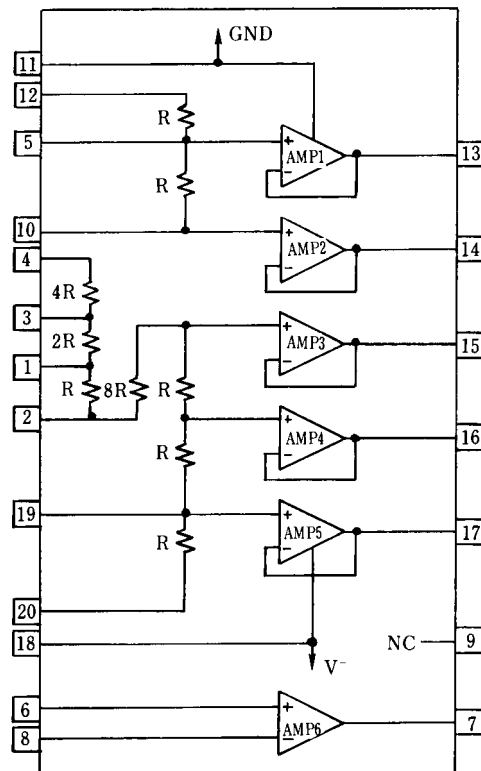
NJM2366G

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



NJM2366

■ 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 to +85	°C
Storage Temperature Range (G/V type)	T _{stg}	-50 to +125	°C

■ ELECTRICAL CHARACTERISTICS

(V = -16V, T_a = 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 = 20μA	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	CONDITION	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	-	-	

[CAUTION]

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