

SANYO

No. 1531B

LA5311MVariable Divided
Voltage Generator for LCD

The LA5311M is a variable divided voltage generator IC for multiple drive of LCD matrix.

Features

- . Power supply for variable bias LCD drive.
- . 4 OP amps to deliver 4 voltage outputs.
- . Low current dissipation (1.0mA max.)
- . Miniflat package.

Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V_{CC} max	30	V
Output Current	I_{OUT}	5	mA
Allowable Power Dissipation	P_d max	300	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-40 to +125	°C

Operating Conditions at Ta=25°C

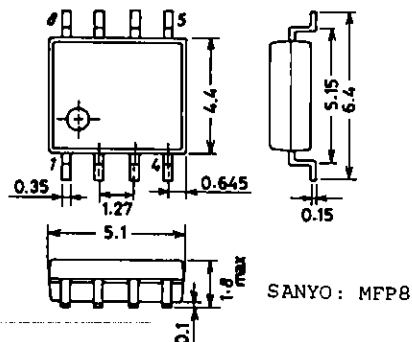
			unit
Supply Voltage Range	V_{CC} op $V_{CC}-V_1 > 1.0V$	11 to 28	V
Recommended Output Current	I_1	0 to 3	mA
Recommended Output Current	I_2, I_3	-3 to +3	mA
Recommended Output Current	I_4	-3 to 0	mA

Operating Characteristics at Ta=25°C, $V_{CC}=20V$

			min	typ	max	unit
Current Dissipation	I_{CC}				1.0	mA
Output Ratio 1	R_1	$V_2/V_1, V_{CC}=0: GND=-20V=V_5$ External $R_A=100k\Omega$	1.94		2.06	
Output Ratio 2	R_2	V_5-V_3/V_5-V_4	1.94		2.06	
Output Ratio 3	R_3	V_2/V_5-V_3	0.97		1.03	
Output Ratio 4	R_4	V_1/V_5-V_4	0.97		1.03	
Load Regulation	ΔV_1	$+100\mu A < I_{OUT} < +3mA$			20	mV
"	ΔV_2	"			20	mV
"	ΔV_3	"			20	mV
"	$-\Delta V_2$	$-3mA < I_{OUT} < -100\mu A$			20	mV
"	$-\Delta V_3$	"			20	mV
"	$-\Delta V_4$	"			20	mV
R_1+R_2	R	0.5V applied across R_1+R_2	33	40	47	kohm

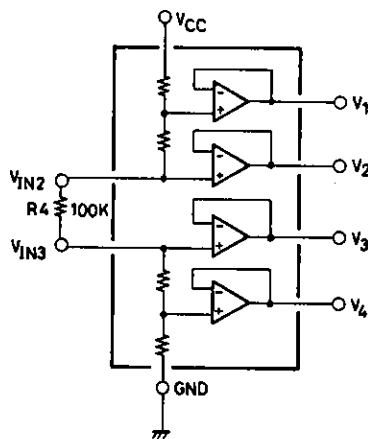
Package Dimensions 3032B

(unit: mm)

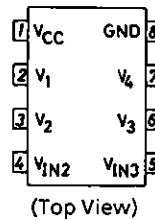


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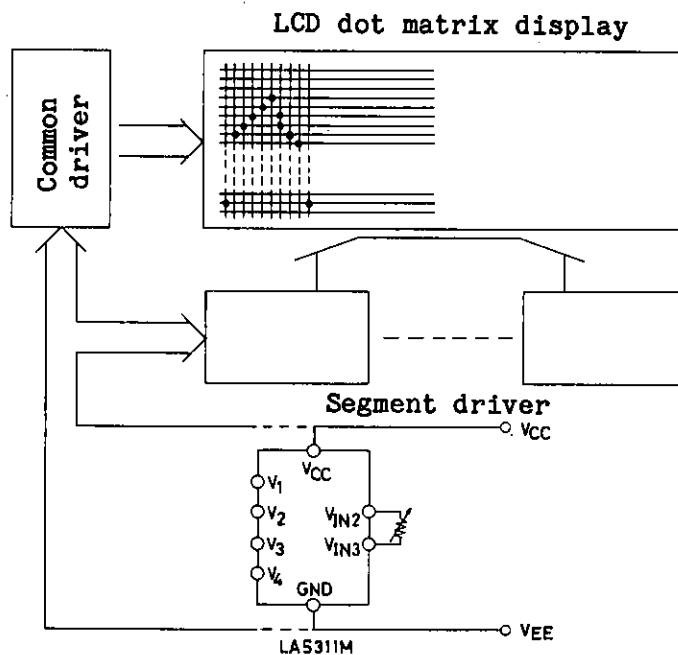
Equivalent Circuit



Pin Assignment



Sample Application Circuit



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