

Ordering number: EN 1531B

Monolithic Linear IC

SANYO	No. 1531B	LA5311M
		Variable Divided Voltage Generator for LCD

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

Features

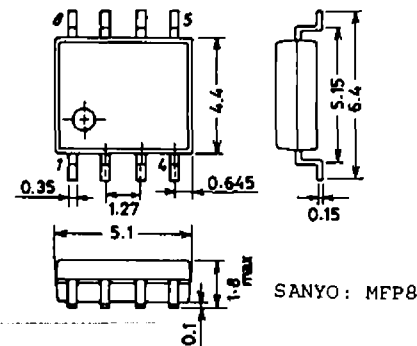
- . Power supply for variable bias LCD drive.
- . 4 OP amps to deliver 4 voltage outputs.
- . Low current dissipation (1.0mA max.)
- . Miniflat package.

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	R1	V ₂ /V ₁ , V _{CC} =0:GND=-20V=V ₅	1.94	2.06	
External R _A =100kohms					
Output Ratio 2	R2	V ₅ -V ₃ /V ₅ -V ₄	1.94	2.06	
Output Ratio 3	R3	V ₂ /V ₅ -V ₃	0.97	1.03	
Output Ratio 4	R4	V ₁ /V ₅ -V ₄	0.97	1.03	
Load Regulation	ΔV1	+100uA<I _{OUT} <+3mA		20	mV
"	ΔV2	"		20	mV
"	ΔV3	"		20	mV
"	-ΔV2	-3mA<I _{OUT} <-100uA		20	mV
"	-ΔV3	"		20	mV
"	-ΔV4	"		20	mV
R ₁ +R ₂	R	0.5V applied across R ₁ +R ₂	33	40	47 kohm

Package Dimensions 3032B
(unit: mm)

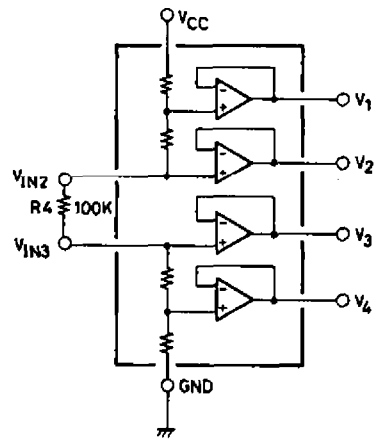


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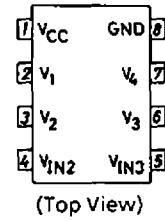
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LA5311M

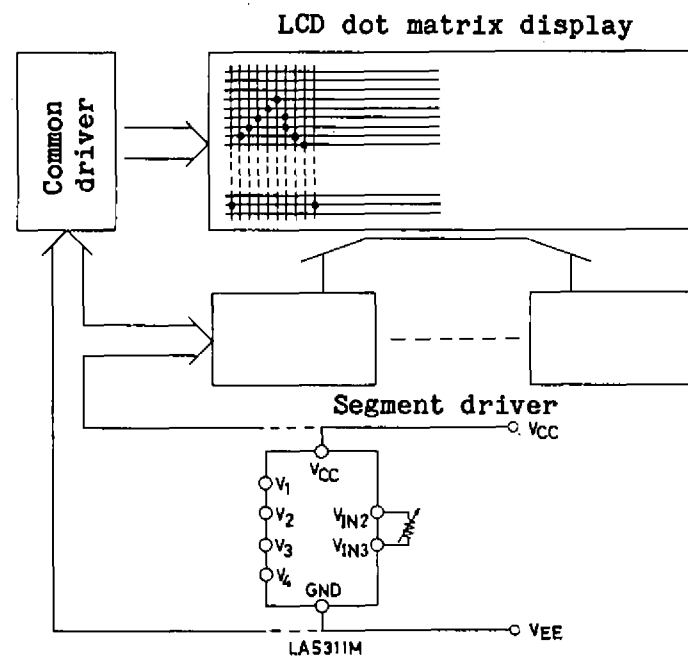
Equivalent Circuit



Pin Assignment



Sample Application Circuit



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