

The LA5310M is a voltage divider IC for use in LCD matrix multidrive applications.

Features

- Power supply for 1/9 bias LCD applications
- 5 OP amps producing 5 voltage outputs
- Low current dissipation (1.0mA max.)
- Miniflat package

Maximum Ratings at $T_a=25^{\circ}\text{C}$

		unit
Maximum Supply Voltage	$V_{CC\max}$	35 V
Output Current	I_{OUT}	5 mA
Allowable Power Dissipation	$P_d\max$	300 mW
Operating Temperature	T_{opr}	-20 to $+75$ $^{\circ}\text{C}$
Storage Temperature	T_{stg}	-30 to $+125$ $^{\circ}\text{C}$

Operating Conditions at $T_a=25^{\circ}\text{C}$

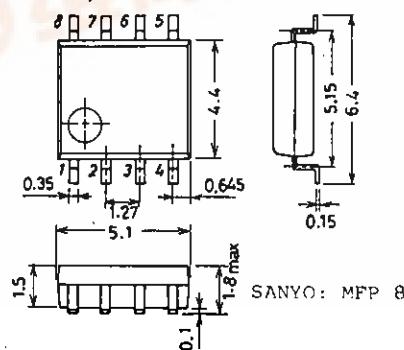
		unit
Supply Voltage Range	$V_{CC\ op}$	11 to 25 V
Recommended Output Current	I_1	0 to 3 mA
"	I_2, I_3	-3 to +3 mA
"	I_4, I_5	-3 to 0 mA

Operating Characteristics at $T_a=25^{\circ}\text{C}$

			min	typ	max	unit
Current Dissipation	I_{CC}	$V_{CC}=25\text{V}$		1.0		mA
Output Voltage	V_1		-1.25	-1.20	-1.15	V
Output Ratio 1	R_{a1}	$V_2/V_1, V_{CC}:0 \text{ Vref}=-12\text{V}, GND=-25\text{V}$	1.96	2.00	2.04	V
" 2	R_{a2}	$V_5-V_3/V_5-V_4,$	"	1.96	2.00	2.04
" 3	R_{b1}	$-V_5/-V_1,$	"	8.73	9.00	9.27
" 4	R_{b2}	$-V_5/-V_2,$	"	4.37	4.50	4.63
" 5	R_{b3}	$-V_5/-V_5+V_3,$	"	4.37	4.50	4.63
" 6	R_{b4}	$-V_5/-V_5+V_4,$	"	8.73	9.00	9.27

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Package Dimensions 3032B (unit: mm)



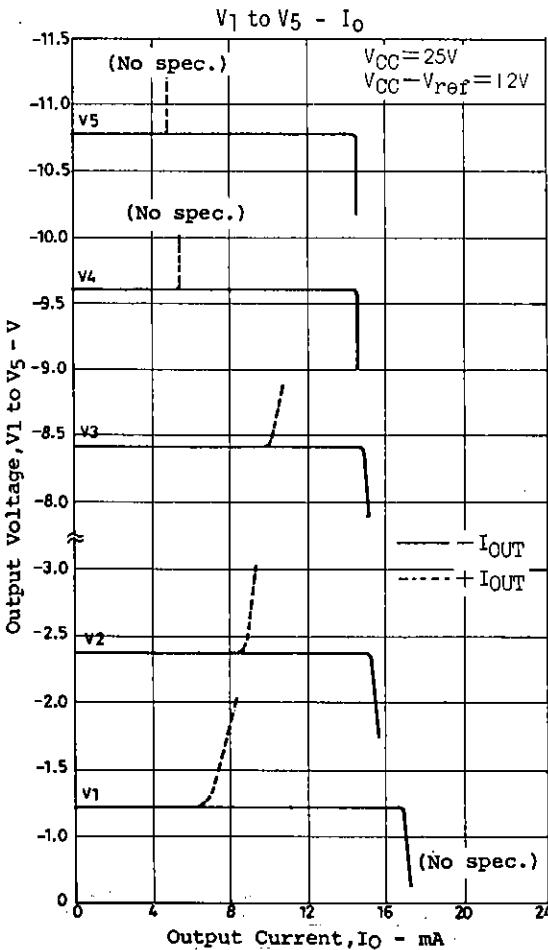
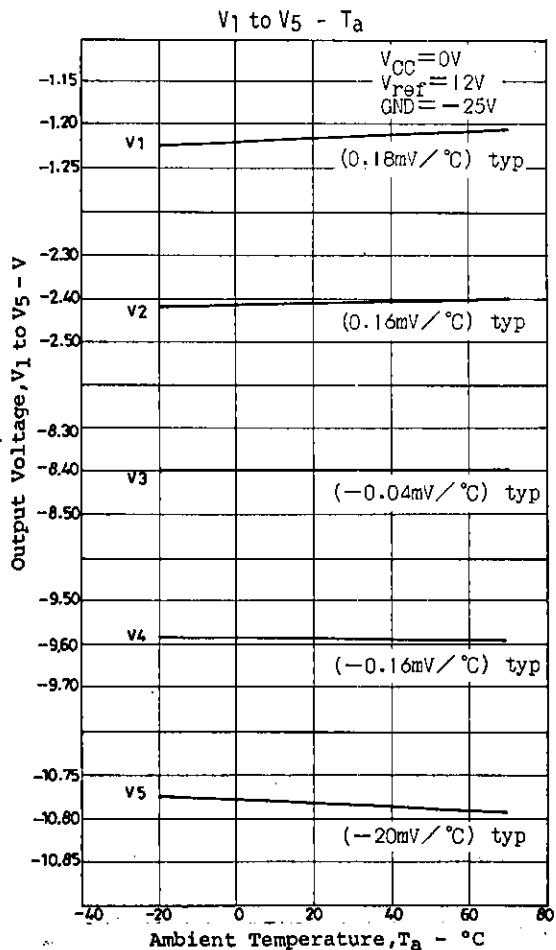
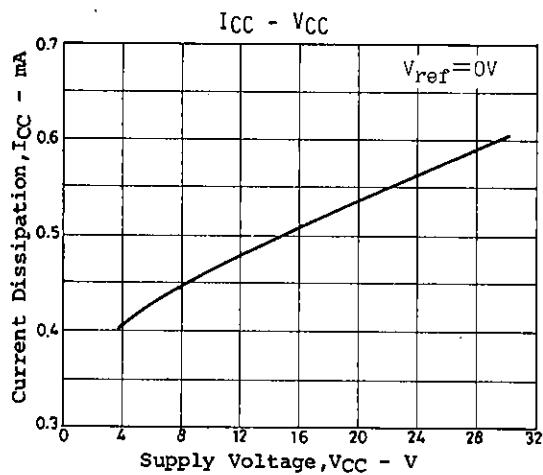
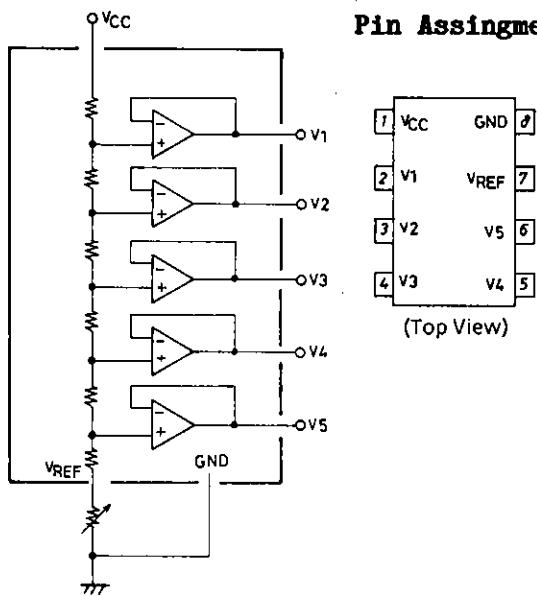
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Load Regulation	ΔV_1	$+100\mu A < I_{OUT} < +3mA$	min	typ	max	unit
"	ΔV_2	"	20	mV		
"	ΔV_3	"	20	mV		
"	$-\Delta V_2$	$-3mA < I_{OUT} < -100\mu A$	20	mV		
"	$-\Delta V_3$	"	20	mV		
"	$-\Delta V_4$	"	20	mV		
"	$-\Delta V_5$	"	20	mV		

Equivalent Circuit



LA5310M

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