

<b>SANYO</b>	No. 1340C	<b>LA5310M</b>
	Voltage Divider for LCD Applications	

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

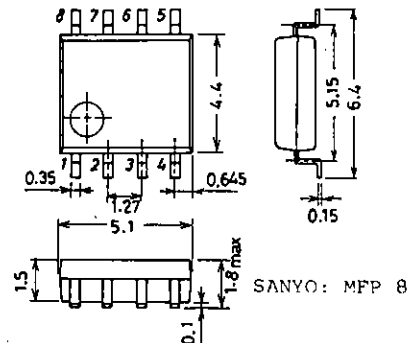
Maximum Ratings at Ta=25°C			unit
Maximum Supply Voltage	V <sub>CCmax</sub>	35	V
Output Current	I <sub>OUT</sub>	5	mA
Allowable Power Dissipation	P <sub>dmax</sub>	300	mW
Operating Temperature	T <sub>opr</sub>	-20 to +75	°C
Storage Temperature	T <sub>stg</sub>	-30 to +125	°C

Operating Conditions at Ta=25°C			unit
Supply Voltage Range	V <sub>CC op</sub>	11 to 25	V
Recommended Output Current	I <sub>1</sub>	0 to 3	mA
"	I <sub>2, I<sub>3</sub></sub>	-3 to +3	mA
"	I <sub>4, I<sub>5</sub></sub>	-3 to 0	mA

Operating Characteristics at Ta=25°C			min	typ	max	unit
Current Dissipation	I <sub>CC</sub>	V <sub>CC</sub> =25V			1.0	mA
Output Voltage	V <sub>1</sub>		-1.25	-1.20	-1.15	V
Output Ratio 1	R <sub>a1</sub>	V <sub>2</sub> /V <sub>1</sub> , V <sub>CC</sub> :0	1.96	2.00	2.04	V
"	2	R <sub>a2</sub> V <sub>5</sub> -V <sub>3</sub> /V <sub>5</sub> -V <sub>4</sub> ,	1.96	2.00	2.04	V
"	3	R <sub>b1</sub> -V <sub>5</sub> /-V <sub>1</sub> ,	8.73	9.00	9.27	V
"	4	R <sub>b2</sub> -V <sub>5</sub> /-V <sub>2</sub> ,	4.37	4.50	4.63	V
"	5	R <sub>b3</sub> -V <sub>5</sub> /-V <sub>5</sub> +V <sub>3</sub> ,	4.37	4.50	4.63	V
"	6	R <sub>b4</sub> -V <sub>5</sub> /-V <sub>5</sub> +V <sub>4</sub> ,	8.73	9.00	9.27	V

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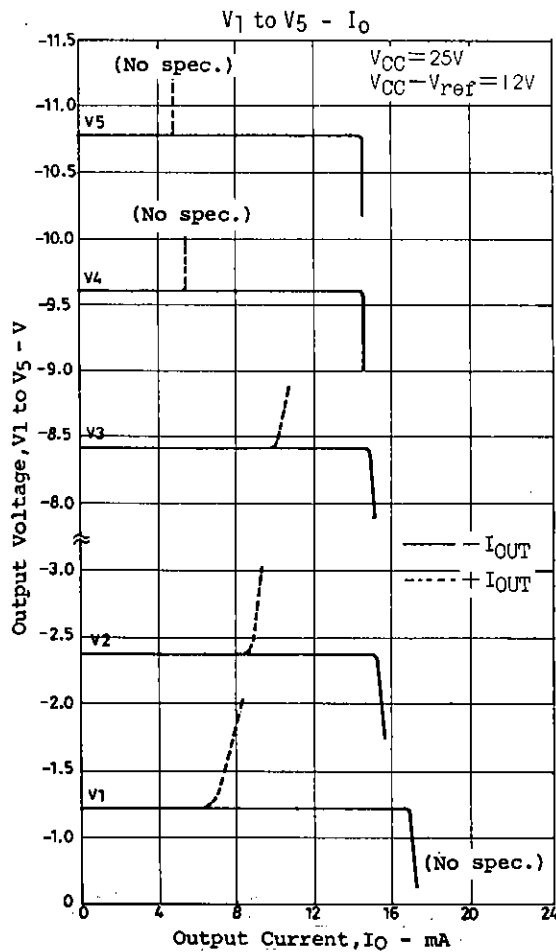
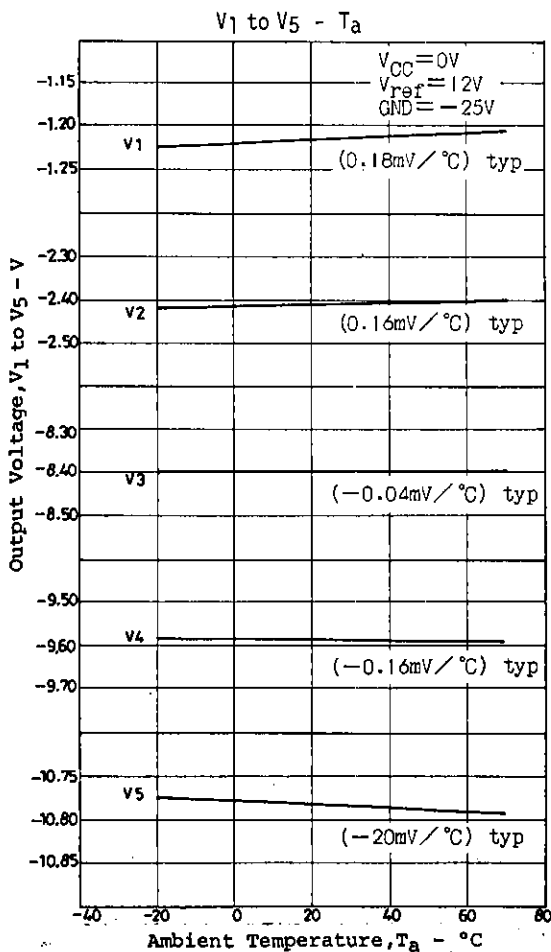
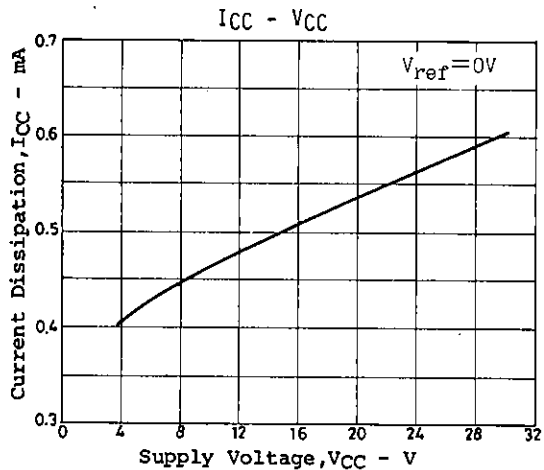
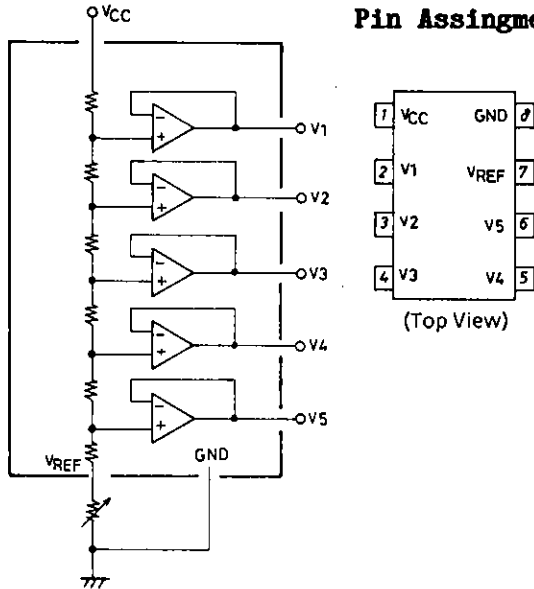
**Package Dimensions 3032B**  
(unit : mm)



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		min	typ	max	unit
Load Regulation	$\Delta V_1$		$+100\mu A < I_{OUT} < +3mA$	20	mV
"	$\Delta V_2$		"	20	mV
"	$\Delta V_3$		"	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



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