

<b>SANYO</b>	No.2073B	Monolithic Liner IC
		<b>LA5527M</b>
<b>Low-Voltage DC Motor Speed Controller</b>		

Especially suited for controlling speed of a low-voltage (3V min.) DC motor for cassette tape recorders, 8mm motion-picture cameras, record players

**Features**

- . Wide operating voltage range (1.8 to 6V)
- . Easy to vary speed
- . Large starting torque
- . Easy to control rotational speed from very low speed to high speed

**Maximum Ratings at Ta=25°C**

			unit
Maximum Supply Voltage	$V_{CCmax}$	8	V
Allowable Power Dissipation	$P_{dmax}$	350	mW
Motor Current	$I_m$	700	mA
Operating Temperature	$T_{opr}$	-20 to +80	°C
Storage Temperature	$T_{stg}$	-40 to +150	°C

**Operating Conditions at Ta=25°C**

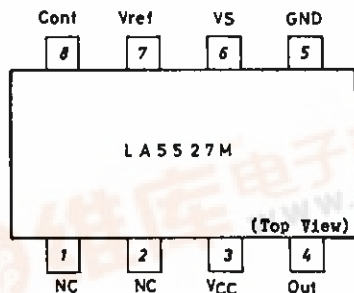
			unit
Supply Voltage Range	$V_{CCOP}$	1.8 to 6	V
Recommended Operating Temperature	$T_{opg}$	-10 to +60	°C

**Operating Characteristics at Ta=25°C**

		min	typ	max	unit	
Reference Voltage	$V_{ref}$	$V_{CC}=3V, I_m=100mA$	1.15	1.25	1.3	V
Quiescent Current Dissipation	$I_d$	$V_{CC}=3V, I_m=100mA$		3.0	6.0	mA
Shunt Ratio	K	$V_{CC}=3V, I_m=50-150mA$	45	50	55	
Residual Voltage	$V_{sat}$	$V_{CC}=3V, I_m=200mA$		0.3	0.5	V
Voltage Characteristic of Reference Voltage	$\frac{\Delta V_{ref}}{V_{ref}} / \Delta V_{CC}$	$V_{ref}=V_{cont}$ $V_{CC}=1.8to6V, I_m=100mA$		0.1	0.3	%/V

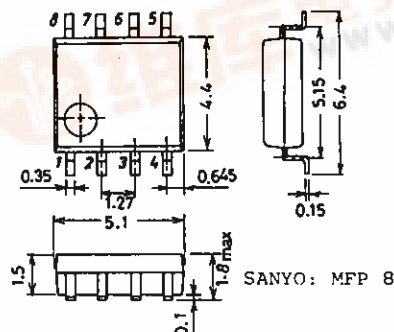
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**Pin Assignment**



**Package Dimensions 3032B**

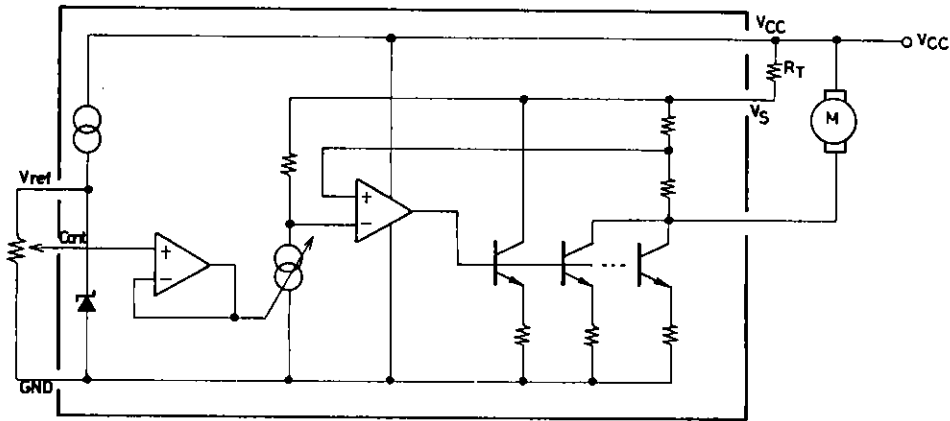
unit: mm



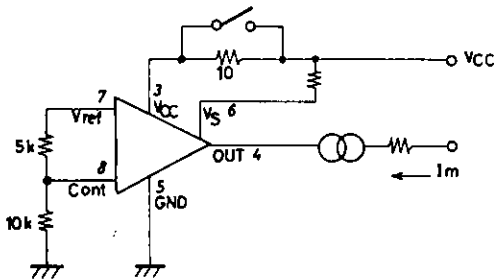
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			min	typ	max	unit
Voltage Characteristic of Shunt Ratio	$\frac{\Delta K}{K/\Delta V_{CC}}$	$V_{CC}=2.0\text{ to }6\text{V},$ $I_m=50\text{--}150\text{mA}$	0.05	0.3		%/V
Current Characteristic of Reference Voltage	$\frac{\Delta V_{ref}}{V_{ref}/\Delta I_m}$	$V_{CC}=3\text{V},$ $I_m=20\text{ to }200\text{mA}$	0.005	0.01		%/mA
Current Characteristic of Shunt Ratio	$\frac{\Delta K}{K/\Delta I_m}$	$V_{CC}=3\text{V},$ $I_m=20\text{--}50\text{mA to }170\text{--}200\text{mA}$	-0.02-0.005	0.02		%/mA

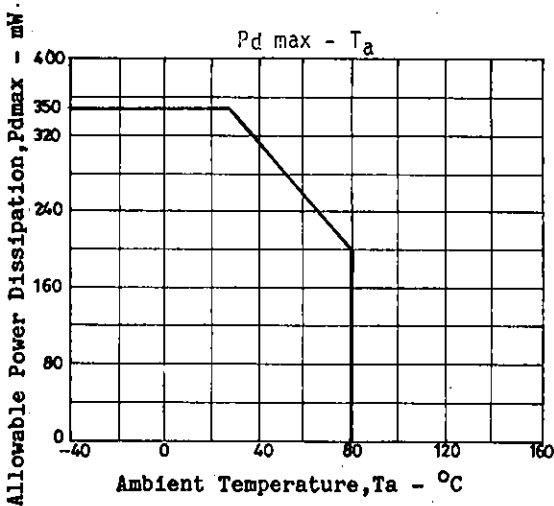
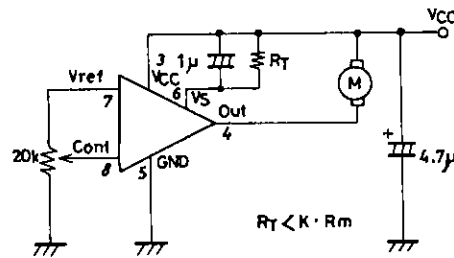
Equivalent Circuit Block Diagram



Test Circuit



Application Circuit



Unit (resistance:  $\Omega$ , capacitance: F)

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