



No.3263

LB1105M

Monolithic Digital IC

### 6-Channel $\times$ 4-Unit Diode Array

The LB1105M is a diode array IC that integrates 4 units of 6-channel diode array with anode-common configuration. It is especially suited for keyboard-use diode matrix, OR gate applications. Replacement of individual diodes with the LB1105M implements higher mounting density.

### Applications

- Keyboard-use diode matrixes, OR gates

## Functions

- Anode-common 6-diode array (4-unit organization)

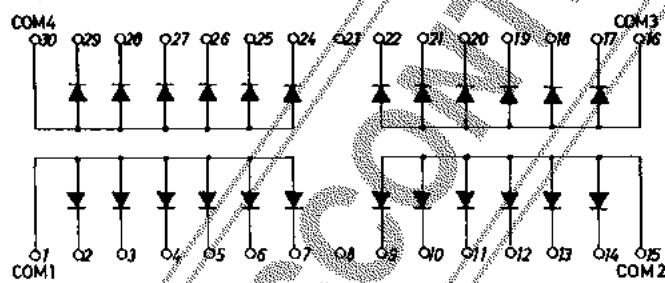
#### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Reverse Voltage	$V_R$	15	V
Average Forward Current	$I_F$	Each diode	5 mA
Surge Forward Current	$I_{FS}$	1 s or less	50 mA
Allowable Power Dissipation	$P_d \text{ max}$		800 mW
Operating Temperature	$T_{opr}$		-20 to +75 °C
Storage Temperature	$T_{stg}$		-40 to +125 °C

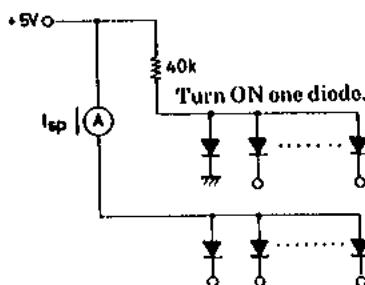
#### Electrical Characteristics at $T_a = 25^\circ\text{C}$

Electrical Characteristics at TA = 25°C		min	typ	max	units
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 0.7mA (each diode)		0.9	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = -15V (each diode)	0.5		μA
Channel Separation 1	I <sub>sp1</sub>	See specified Test Circuit (between units).		3.0	μA
Channel Separation 2	I <sub>sp2</sub>			3.0	μA
Channel Separation 3	I <sub>sp3</sub>			3.0	μA
Channel Separation 4	I <sub>sp4</sub>			3.0	μA

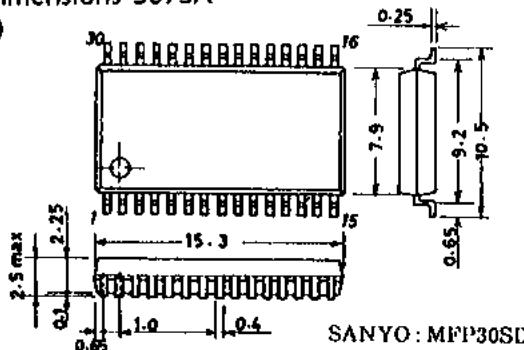
## **Equivalent Circuit and Pin Assignment**



### Channel Separation Test Circuit



Package Dimensions 3073A  
(unit : mm)



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