

# 5 x 7 matrix display

## LM-2035 Series

The LM-2035 series are 5 x 7 matrix displays which can be used in a wide variety of applications, including alphabet, numeric, symbol, and graphic displays. Bright red and green are available.

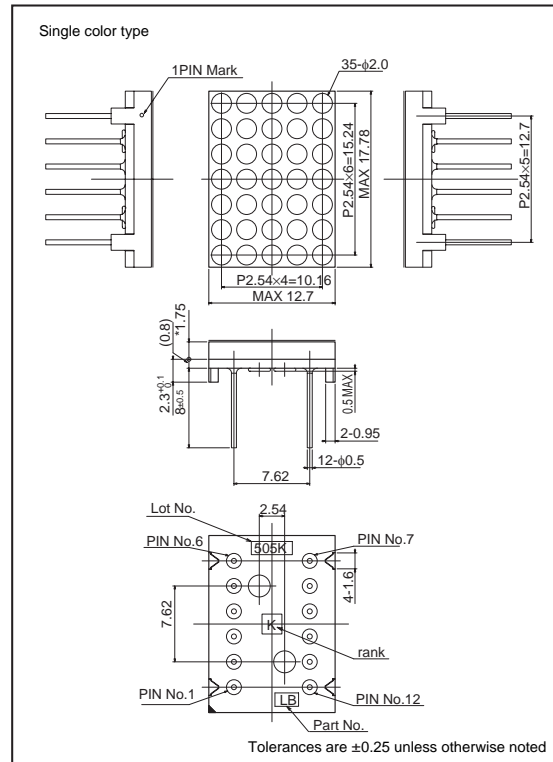
**●Application**

Light sources for displays

**●Features**

- 1) 5 x 7 dot matrix Circular emitters
- 2) External dimensions : 17.378 x 12.7 x 4.05 mm
- 3) Emitters : Circular, 2.0mm diameter
- 4) Black package

**●Dimensions (Unit: mm)**



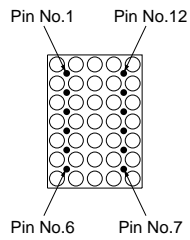
**●Selection guide**

Emitting color	Red*	Green	Red / Green
Common			
Anode	LM-2035LB	LM-2035MB	—

\* High-luminance red

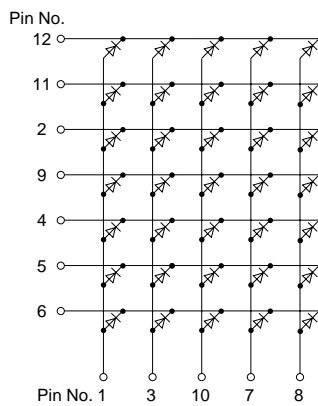
LED displays

●Pin assignments (Top view)



Single color type

●Internal circuit schematic



Single color type

●Absolute maximum ratings (Ta=25°C)

Single – color type

Parameter	Symbol	LB*2	MB	Unit
		Red	Green	
Power dissipation	P <sub>D</sub>	75	42	mW/dot
Forward current	I <sub>F</sub>	30	15	mA/dot
Peak forward current	I <sub>FP</sub>	80*1	60*1	mA/dot
Reverse voltage	V <sub>R</sub>	5	5	V
Operating temperature	T <sub>opr</sub>	-25 to +60	-25 to +75	°C
Storage temperature	T <sub>stg</sub>	-30 to +85	-30 to +85	°C

\*1 Pulse width 1msec duty 1 / 5

\*2 High-luminance red

## LED displays

## ●Electrical and optical characteristics (Ta=25°C)

Single – color type

Parameter	Symbol	Conditions	LB			MB			Unit
			Red*1			Green			
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	$V_F$	$I_F=10\text{mA}$	–	1.75	2.5	–	2.1	2.8	V
Reverse current	$I_R$	$V_R=3\text{V}$	–	–	100	–	–	100	$\mu\text{A}$
Peak wavelength	$\lambda_P$	$I_F=10\text{mA}$	–	660	–	–	563	–	nm
Spectral line half width	$\Delta\lambda$	$I_F=10\text{mA}$	–	25	–	–	40	–	nm

© Not designed for radiation resistance.

\*1  $I_F = 20\text{mA}$ 

## ●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red*1	LB	1.4	5.0	–	mcd
Green	MB	0.9	2.5	–	mcd

Note : Measured at  $I_F = 10\text{mA}$ \*1  $I_F = 20\text{mA}$

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