

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.

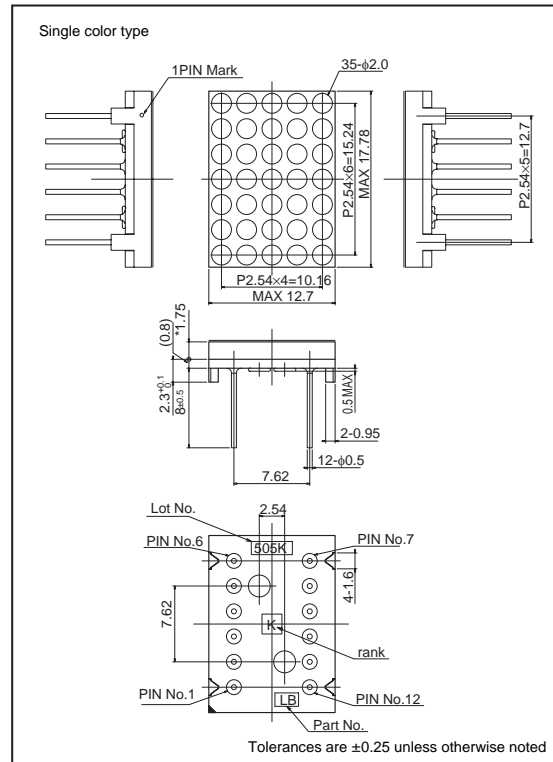
●Application

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)



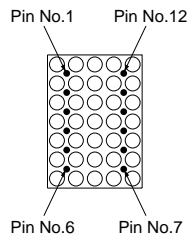
●Selection guide

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

* High-luminance red

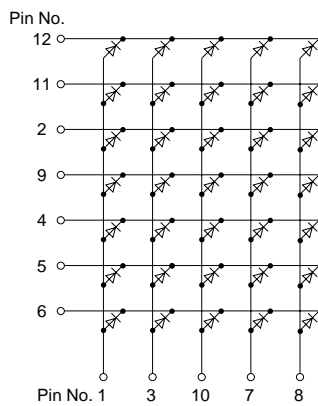
LED displays

●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 _D	75	42	mW/dot
Forward current	I _F	30	15	mA/dot
Peak forward current	I _{FP}	80*1	60*1	mA/dot
Reverse voltage	V _R	5	5	V
Operating temperature	T _{opr}	-25 to +60	-25 to +75	°C
Storage temperature	T _{stg}	-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	μA
Peak wavelength	λ_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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