

# 16×16 matrix displays

## LM-1256 Series

The LM-1256 series are 16 × 16 matrix displays which can be used in a wide variety of applications, including alpha-  
bet, numeric, symbol, and red are available.

### ●Applications

Light sources for displays

### ●Features

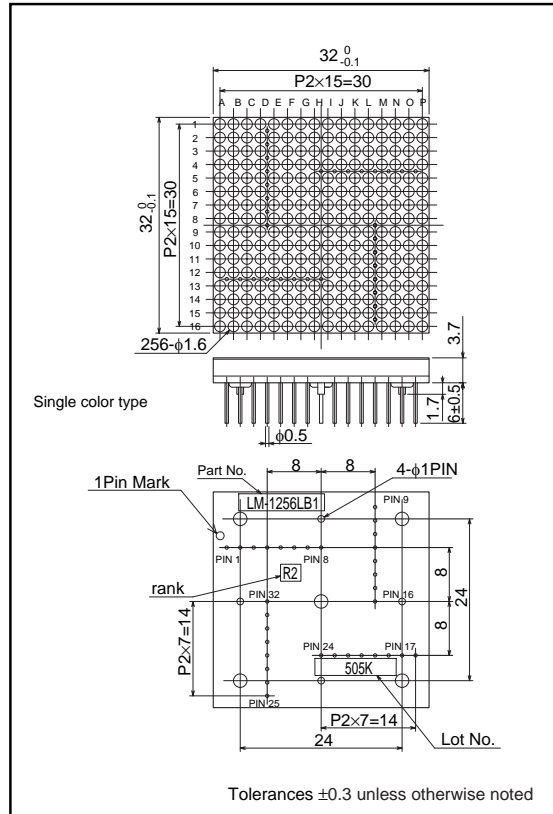
- 1) 16×16 dot matrix  
Circular emitters.
- 2) External dimensions : 32×32×5.4mm
- 3) Emitters : Circular, 1.6mm diameter.
- 4) Black package.

### ●Selection guide

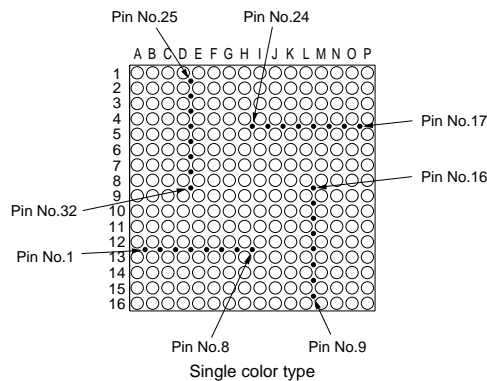
Emitting color	Red*
Common	
Anode	LM-1256LB1

\* Bright red

### ●Dimensions ( Unit : mm )

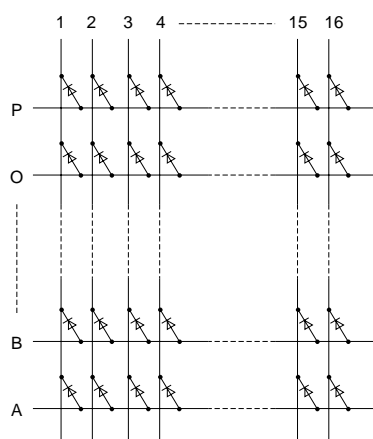


### ●Pin assignments (Top view)



## LED displays

## ●Internal circuit schematic



Single color type(LB1)

## ●Pin assignment table

Single-color type(LB1)

Pin No.	Connection	Pin No.	Connection
1	A Cathode	17	P Cathode
2	B Cathode	18	O Cathode
3	C Cathode	19	N Cathode
4	D Cathode	20	M Cathode
5	E Cathode	21	L Cathode
6	F Cathode	22	K Cathode
7	G Cathode	23	J Cathode
8	H Cathode	24	I Cathode
9	16 Anode	25	1 Anode
10	15 Anode	26	2 Anode
11	14 Anode	27	3 Anode
12	13 Anode	28	4 Anode
13	12 Anode	29	5 Anode
14	11 Anode	30	6 Anode
15	10 Anode	31	7 Anode
16	9 Anode	32	8 Anode

## ●Absolute maximum ratings (Ta=25°C)

Single-color type

Parameter	Symbol	LB1	Unit
		Red*2	
Power dissipation	P <sub>D</sub>	50	mW/dot
Forward current	I <sub>F</sub>	20	mA/dot
Peak forward current	I <sub>FP</sub>	60*1	mA/dot
Reverse voltage	V <sub>R</sub>	4	V
Operating temperature	T <sub>opr</sub>	-20 to +50	°C
Storage temperature	T <sub>stg</sub>	-30 to +75	°C

\*1 Pulse width 1msec duty 1 / 16

\*2 Bright red

## LED displays

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

Single-color type

Parameter	Symbol	Conditions	LB1			Unit
			Red*1			
			Min.	Typ.	Max.	
Forward voltage	$V_F$	$I_F=20\text{mA}$	–	1.75	2.5	V
Reverse current	$I_R$	$V_R=3\text{V}$	–	–	100	$\mu\text{A}$
peak wavelength	$\lambda_P$	$I_F=20\text{mA}$	–	660	–	nm
Spectral half-power bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	–	25	–	nm

©Not designed for radiation resistance.

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

## ●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red*1	LB1	22	56	–	mcd

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

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