

# 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.

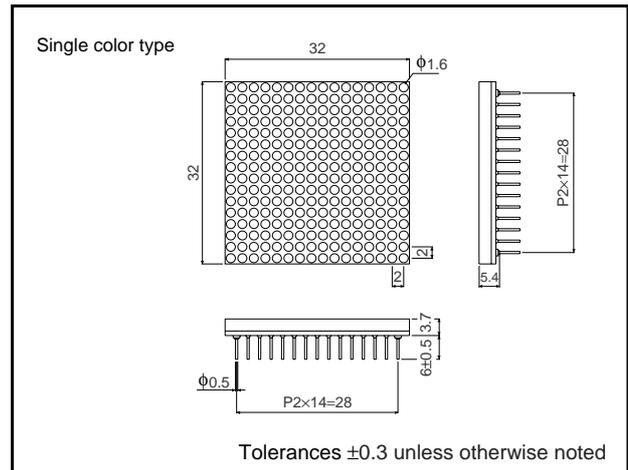
### ●Applications

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.

### ●External dimensions ( Unit : mm )

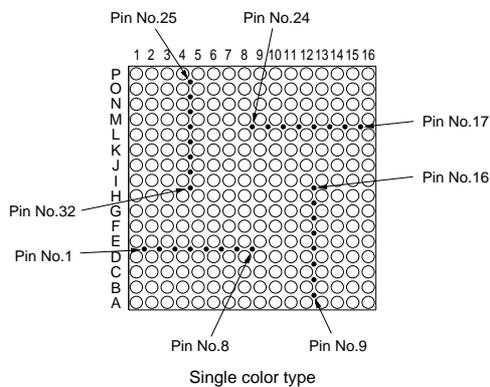


### ●Selection guide

Emitting color	Red*	Red
Common		
Anode	LM-1256LB	—
Cathode	—	LM-1256VB

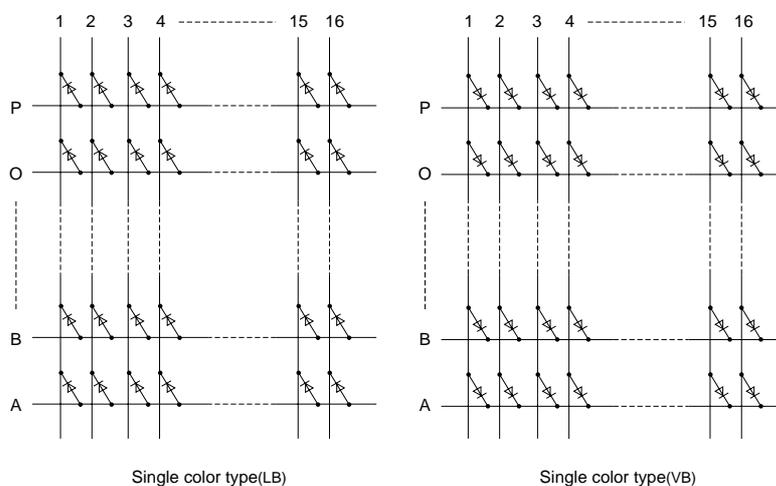
\* Bright red

### ●Pin assignments



## LED displays

## ●Internal circuit schematic



## ●Pin assignment table

Single-color type(LB)

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

Single-color type(VB)

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

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

Single-color type

Parameter	Symbol	LB	VB	Unit
		Red*2	Red	
Power dissipation	P <sub>D</sub>	2.4	2.7	W
Forward current	I <sub>F</sub>	15	15	mA
Peak forward current	I <sub>FP</sub>	60*1	60*1	mA
Reverse voltage	V <sub>R</sub>	3	3	V
Operating temperature	T <sub>opr</sub>	-20 to +50		°C
Storage temperature	T <sub>stg</sub>	-25 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	LB			VB			Unit
			Red*1			Red			
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	–	1.75	2.5	–	2.0	2.8	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	–	–	100	–	–	100	μA
peak wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	–	660	–	–	650	–	nm
Spectral half-power bandwidth	Δλ	I <sub>F</sub> =20mA	–	25	–	–	40	–	nm

©Not designed for radiation resistance.

\*1 I<sub>F</sub> = 20mA

## ●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red*1	LB	0.9	2.5	–	mcd
Red	VB	0.22	0.63	–	mcd

Note : Measured at I<sub>F</sub> = 10mA (LB1 : I<sub>F</sub>=20mA)\*1 I<sub>F</sub> = 20mA

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