

# 16 × 32 matrix display

## LM-2512 Series

The LM-2512 series are a 16 × 32 matrix display which can be used in a wide variety of applications, including alpha-bet, numeric, symbol, and graphic displays. Dual-color red/green is available.

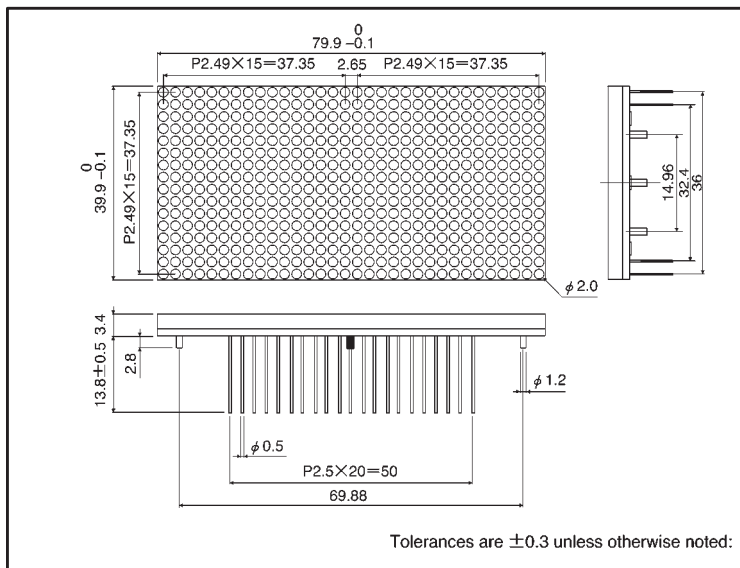
### ●Applications

Light sources for displays

### ●Features

- 1) 16 × 32 dot matrix  
Circular emitters : 2.0 mm diameter
- 2) External dimensions: 39.9 × 79.9 × 6.2 mm
- 3) Black package.

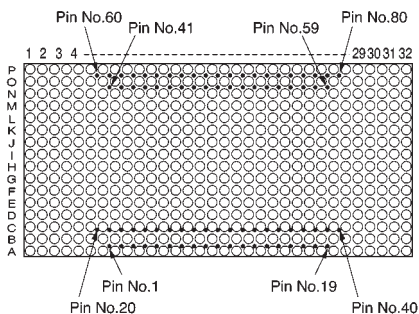
### ●External dimensions (Units: mm)



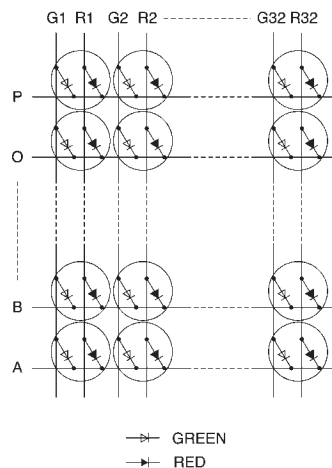
### ●Selection guide

Emitting color	Red / Green
Common	—
Anode	—
Cathode	LM-2512MUC

### ●Pin assignments



### ●Internal circuit schematic



## ● Pin assignment table

Pin No.	Connection	Pin No.	Connection	Pin No.	Connection	Pin No.	Connection
1	A Cathode	21	E Cathode	41	I Cathode	61	M Cathode
2	B Cathode	22	F Cathode	42	J Cathode	62	N Cathode
3	C Cathode	23	G Cathode	43	K Cathode	63	O Cathode
4	R1 Anode	24	H Cathode	44	G1 Anode	64	P Cathode
5	R3 Anode	25	R2 Anode	45	G3 Anode	65	G2 Anode
6	R5 Anode	26	R4 Anode	46	G5 Anode	66	G4 Anode
7	R7 Anode	27	R6 Anode	47	G7 Anode	67	G6 Anode
8	R9 Anode	28	R8 Anode	48	G9 Anode	68	G8 Anode
9	R11 Anode	29	R10 Anode	49	G11 Anode	69	G10 Anode
10	R13 Anode	30	R12 Anode	50	G13 Anode	70	G12 Anode
11	R15 Anode	31	R14 Anode	51	G15 Anode	71	G14 Anode
12	R17 Anode	32	R16 Anode	52	G17 Anode	72	G16 Anode
13	R19 Anode	33	R18 Anode	53	G19 Anode	73	G18 Anode
14	R21 Anode	34	R20 Anode	54	G21 Anode	74	G20 Anode
15	R23 Anode	35	R22 Anode	55	G23 Anode	75	G22 Anode
16	R25 Anode	36	R24 Anode	56	G25 Anode	76	G24 Anode
17	R27 Anode	37	R26 Anode	57	G27 Anode	77	G26 Anode
18	R29 Anode	38	R28 Anode	58	G29 Anode	78	G28 Anode
19	R31 Anode	39	R30 Anode	59	G31 Anode	79	G30 Anode
20	D Cathode	40	R32 Anode	60	L Cathode	80	G32 Anode

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

Parameter	Symbol	MUC		Unit
		Red	Green	
Power dissipation	P <sub>D</sub>	2.69	2.69	W
Forward current	I <sub>F</sub>	15	15	mA
Peak forward current	I <sub>FP</sub>	60*	60*	mA
Reverse voltage	V <sub>R</sub>	4	4	V
Operating temperature	T <sub>opr</sub>	-20~+50		°C
Storage temperature	T <sub>stg</sub>	-25~+75		°C

\* Pulse width 1msec duty 1 / 16

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

Parameter	Symbol	Conditions	MUC						Unit
			Red			Green			
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	—	2.0	2.8	—	2.1	2.8	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	—	—	100	—	—	100	μ A
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> =10mA	—	635	—	—	563	—	nm
Spectral line half width	Δ λ	I <sub>F</sub> =10mA	—	40	—	—	40	—	nm

©Not designed for radiation resistance.

●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red	MUC	0.22	0.63	—	mcd
Green		0.56	1.6	—	mcd

Note: Measured at If = 10mA