

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.

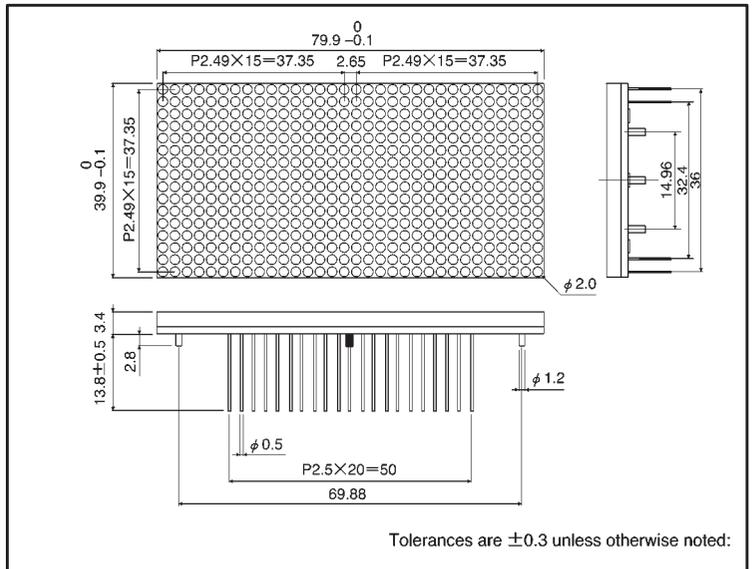
●Applications

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.

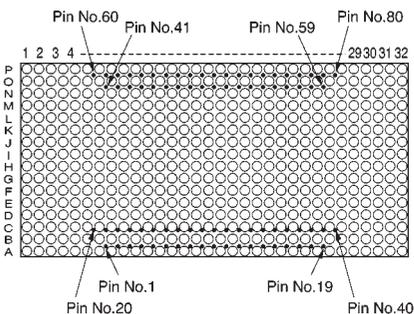
●External dimensions (Units: mm)



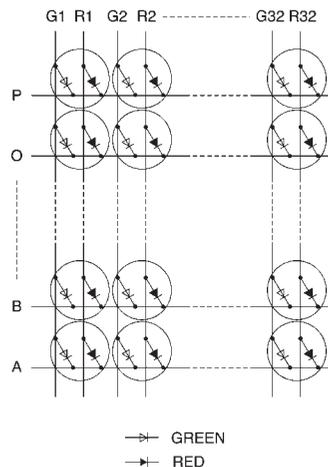
●Selection guide

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

●Pin assignments



●Internal circuit schematic



● Pin assignment table

Pin No.	Connection										
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 _D	2.69	2.69	W
Forward current	I _F	15	15	mA
Peak forward current	I _{FP}	60*	60*	mA
Reverse voltage	V _R	4	4	V
Operating temperature	T _{opr}	-20~+50		°C
Storage temperature	T _{stg}	-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 _F	I _F =10mA	—	2.0	2.8	—	2.1	2.8	V
Reverse current	I _R	V _R =3V	—	—	100	—	—	100	μA
Peak wavelength	λ _P	I _F =10mA	—	635	—	—	563	—	nm
Spectral line half width	Δλ	I _F =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 $I_F = 10\text{mA}$