

LM-2256 series

16 × 16 dot matrix display, single or dual color, 2.0 mm diameter element

The LM-2256 series are 16 × 16 dot matrix displays. They are available with 2.0 mm diameter elements.

Features

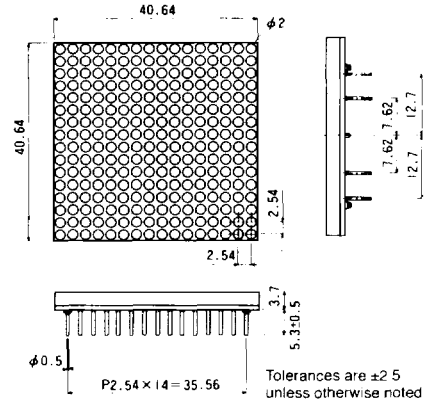
- 16 × 16 dot matrix; with round ($\phi = 2.0$ mm) emitters, external dimensions 40.64 × 40.64 × 5 mm
- available in red and green single color or red and green dual color displays
- package has black-painted surface, segments are tinted
- thin outer casing, multiple units can be coupled together
- clear display
- wide viewing angle

Applications

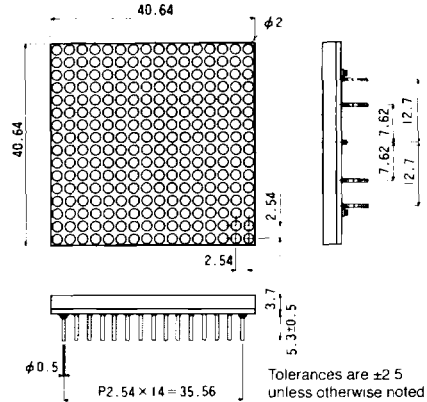
- alpha displays
- numeric displays
- graphic displays

Dimensions (Units : mm)

Single color



Two color



Selection guide

Part no.			LM-2256MUB
Color & wavelength			Red, 635 nm, green, 563 nm
Common pin			Anode
Availability			semi-standard
Part no.	LM-2256UB	LM-2256MB	
Color & wavelength	Red, 635 nm	Green, 563nm	
Common pin	Cathode	Cathode	
Availability	semi-standard	semi-standard	

Pin connection, two color

Pin no.	Connection	Pin no.	Connection
1	A cathode	25	R1 anode
2	C cathode	26	R2 anode
3	D cathode	27	R3 anode
4	B cathode	28	R4 anode
5	G9 anode	29	R5 anode
6	G10 anode	30	R6 anode
7	G11 anode	31	R7 anode
8	G12 anode	32	R8 anode
9	G13 anode	33	J cathode
10	G14 anode	34	L cathode
11	G15 anode	35	K cathode
12	G16 anode	36	I cathode
13	H cathode	37	G1 anode
14	F cathode	38	G2 anode
15	E cathode	39	G3 anode
16	G cathode	40	G4 anode
17	R9 anode	41	G5 anode
18	R10 anode	42	G6 anode
19	R11 anode	43	G7 anode
20	R12 anode	44	G8 anode
21	R13 anode	45	O cathode
22	R14 anode	46	M cathode
23	R15 anode	47	N cathode
24	16 anode	48	P cathode

Pin connection, single color

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

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	LM-2256 UB	LM-2256 MB	LM-2256MUB		Unit	Conditions
		Red	Green	Red	Green		
Power dissipation	P_d	2.88		2.7		mW	
Forward current	I_F	15		15		mA	
Peak forward current	I_{FP}	60		60		mA	Pulse width 1 ms, duty 6.25%
Reverse voltage	V_R	3		3		V	
Operating temperature	T_{opr}	-20 ~ +50		-20 ~ +50		$^\circ\text{C}$	
Storage temperature	T_{stg}	-30 ~ +75		-25 ~ +75		$^\circ\text{C}$	

Electro-optical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Sym	LM-2256UB		LM-2256MB		LM-2256MUB				Unit	Conditions
		Red		Green		Red		Green			
		Typ	Max	Typ	Max	Typ	Max	Typ	Max		
Forward voltage	V_F	2.0	2.8	2.1	2.8	2.0	2.8	2.1	2.8	V	$I_F = 10\text{ mA}$
Reverse current	I_R		100		100		100		100	μA	$V_R = 3\text{ V}$
Peak wavelength	λ_p	635		563		635		563		nm	$I_F = 10\text{ mA}$
Spectral half-width	$\Delta\lambda$	40		40		40		40		nm	$I_F = 10\text{ mA}$

Luminous intensity

Part no.	Color	Min	Typical	Max	Unit	Conditions
LM-2256UB	Red	0.22	0.63		mcd	$I_F = 10\text{ mA}$
LM-2256MB	Green	0.36	1.0		mcd	$I_F = 10\text{ mA}$
LM-2256MUB	Red	0.22	0.63		mcd	$I_F = 10\text{ mA}$
	Green	0.56	1.6		mcd	$I_F = 10\text{ mA}$