

LightKey Datasheet of 1.20 inch 8x8 Dual Color Square Dot Matrix LED Display

LM1288A/BRG Series – 1.20 inch 5x7 Dual Color Square Dot Matrix LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



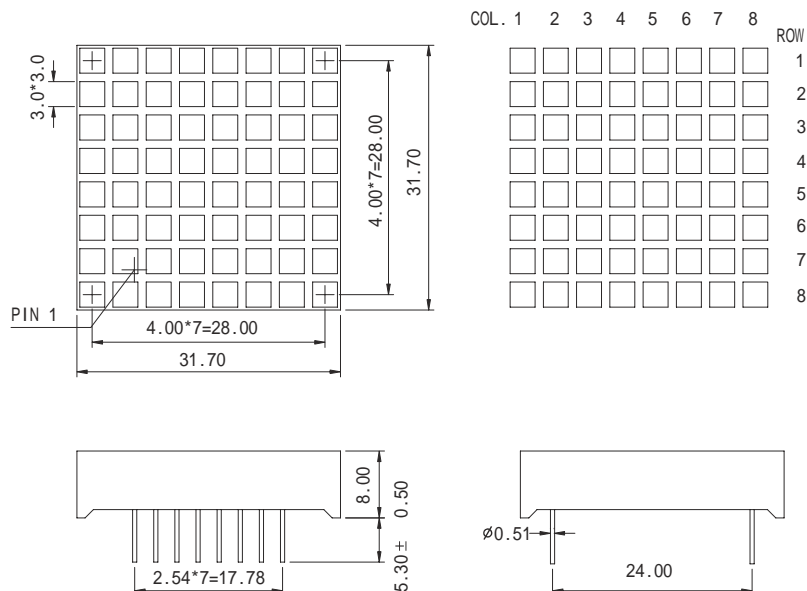
Features

- 31.70mm (1.20 inch) matrix height
- Dot size: 3x3mm
- Pitch: 4mm
- Wide viewing angle
- Emitted colors: red and green
- I.C. compatible
- Low power consumption
- White dot, grey or black face
- RoHS compliant

Available options

- Alternative emitting luminosity:
Standard or high brightness version
- Alternative emitted color
- Alternative dot color
- Alternative face color
- Both CA or CC versions are available
- Cropped terminal pins

Package Dimensions



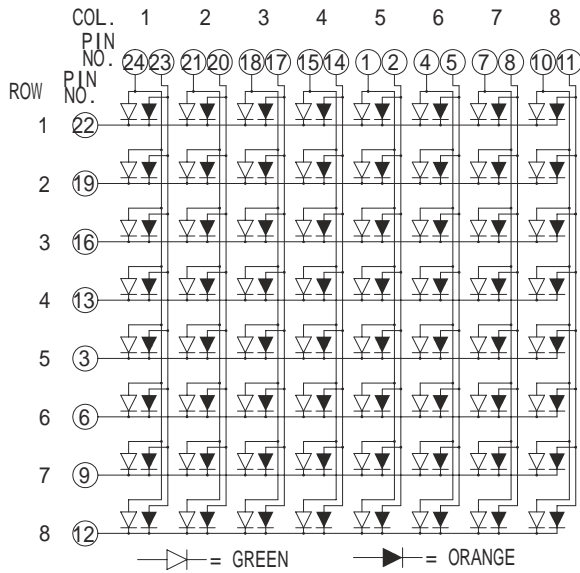
Notes:

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

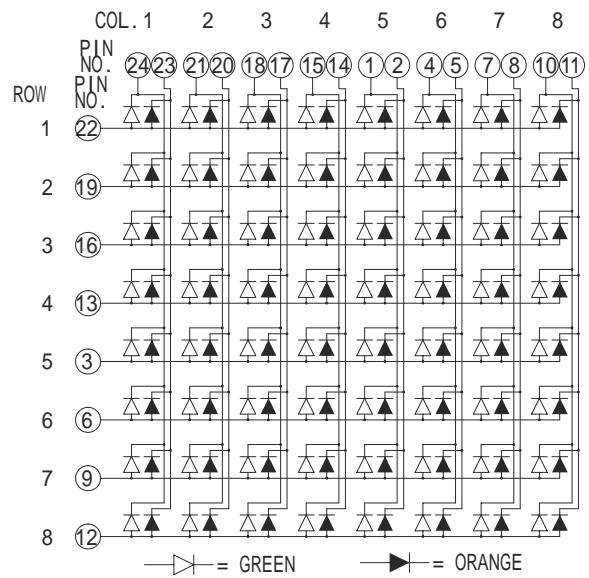
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Internal Circuit Diagram

LM12288A (Common Cathode Row)



LM12288B (Common Anode Row)



Selection Guide

1.20 inch 8x8 Red-Green LED dot matrix module, Matrix Height: 31.70mm(1.20 inch), External Dimensions: 31.70x31.70x8.00mm (LxWxH)

Description	Part No.		Chip			Iv(mcd)@20mA	
	Common Cathode Row	Common Anode Row	Material	Color	W LD (nm)	One Dot	
						Min.	Typ.
Standard Brightness	LM12288ARG	LM12288BRG	GaAlAs	Super Red	640	8	10
			GaP	Green	568	7	9
Ultra-High Brightness	LM12288AURUG	LM12288BURUG	AlGaInP	Ultra Red	640	30	45
			AlGaInP	Ultra Green	573	30	45

Electrical Characteristics & Absolute Maximum Ratings

Color	Electrical optical Characteristics ^[1]			Absolute Maximum Ratings ^[3]			
	V _F (V) @ I _F =20mA ^[2]		Reverse Current V _R =5V (uA)	Power Dissipation (mW)	DC Forward Current (mA)	Peak Forward Current ^[2] (mA)	Reverse Voltage (V)
	Typ.	Max.					
Super Red	1.8	2.2	30	60	25	100	5
Green	2.2	2.5	30	80	30	100	5
Ultra Red	1.9	2.6	30	60	30	100	5
Ultra Green	2.1	2.6	30	75	30	100	5

Operating/ Storage Temp.: -40 to +80 deg.;

Lead Solder Temp.: 260 deg. for 3-5 Sec. 2mm below package base

Notes:

1. At Ta = 25 °C.
2. Forward voltage at forward current = 20mA.
3. Peak forward current at 1/10 Duty Cycle, 0.1ms Pulse.