

LM40044A/BRG Series – 4.00 inch 4x4 Dual Color Dot Matrix LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



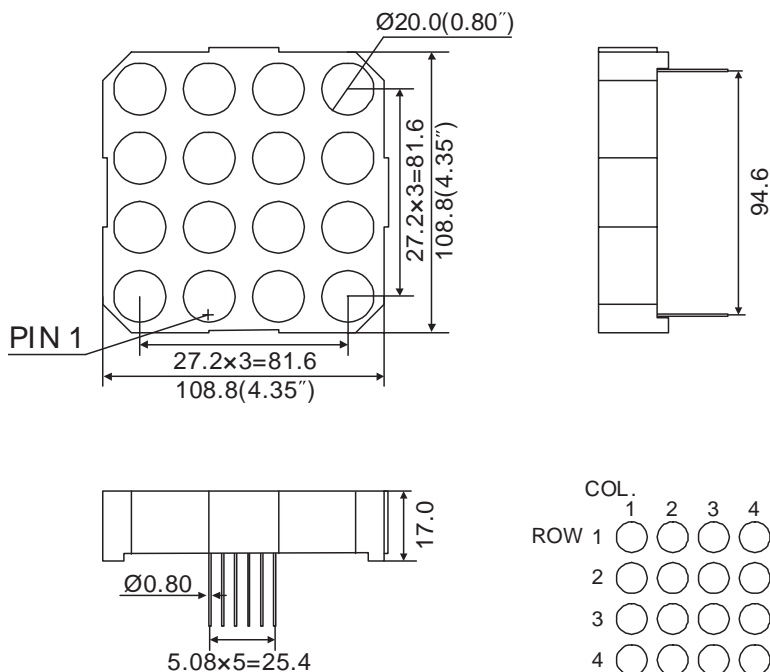
Features

- 108.80 mm (4.00 inch) digit high
- Dot size: Diameter 20.00 mm
- Pitch: 27.20 mm
- 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
- Both CC and CA versions are available
- Cropped terminal pins

Package Dimensions



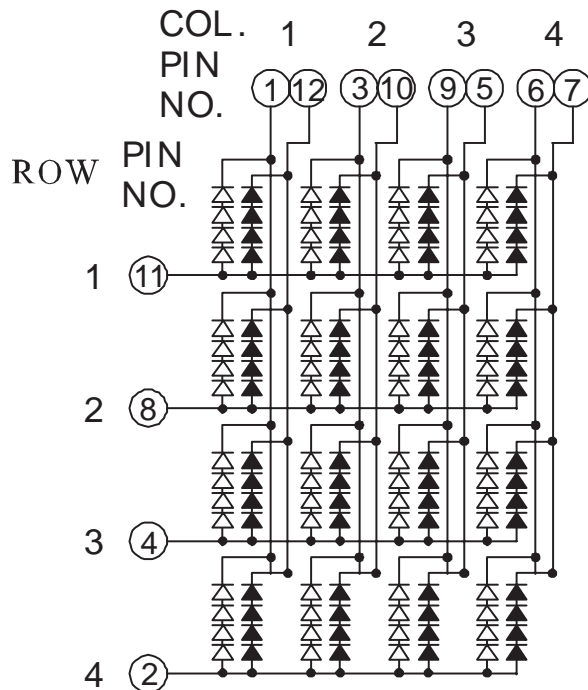
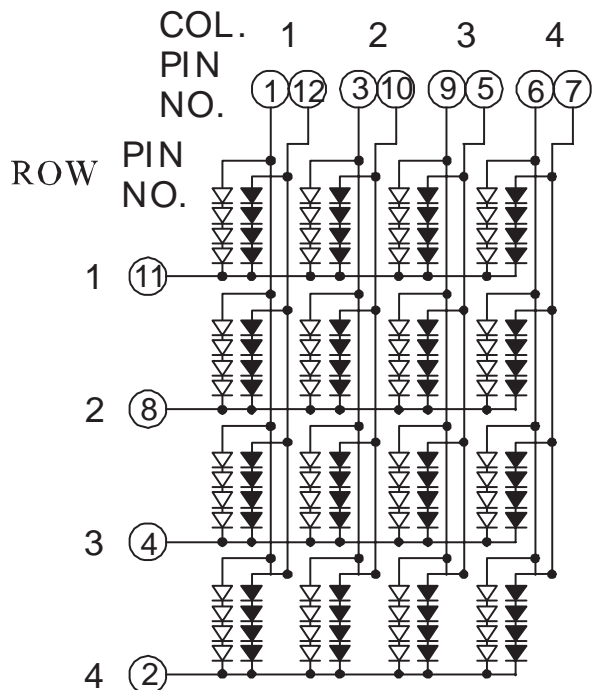
Notes:

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.

Internal Circuit Diagram

LM40044ARG (Common Cathode Row)

LM40044BRG (Common Anode Row)



Selection Guide

4.00 inch 4x4 Red-Green LED dot matrix module, Matrix Height: 108.80mm(4.00 inch), External Dimensions: 108.80x108.80x17.00mm (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	LM40044ARG	LM40044BRG	GaAlAs	Super Red	640	24	30
			GaP	Green	568	21	27
Ultra-High Brightness	LM40044AURUG	LM40044BURUG	AlGaInP	Ultra Red	640	90	135
			AlGaInP	Ultra Green	573	90	135

Electrical Characteristics & Absolute Maximum Ratings

Color	Electrical optical Characteristics ^[1]			Absolute Maximum Ratings ^[1]			
	V _F (V) @ I _F =20mA ^[2]		Reverse Current V _R =5V (uA)	Power Dissipation (mW)	DC Forward Current (mA)	Peak Forward Current ^[3] (mA)	Reverse Voltage (V)
	Typ.	Max.					
Super Red	7.2	8.8	100	240	25	100	5
Green	8.8	5.0	100	320	30	100	5
Ultra Red	7.6	10.4	100	240	30	100	5
Ultra Green	8.4	10.4	100	300	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.