LM23088A/BRGB Series – 2.30 inch 8x8 RGB Dot Matrix LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

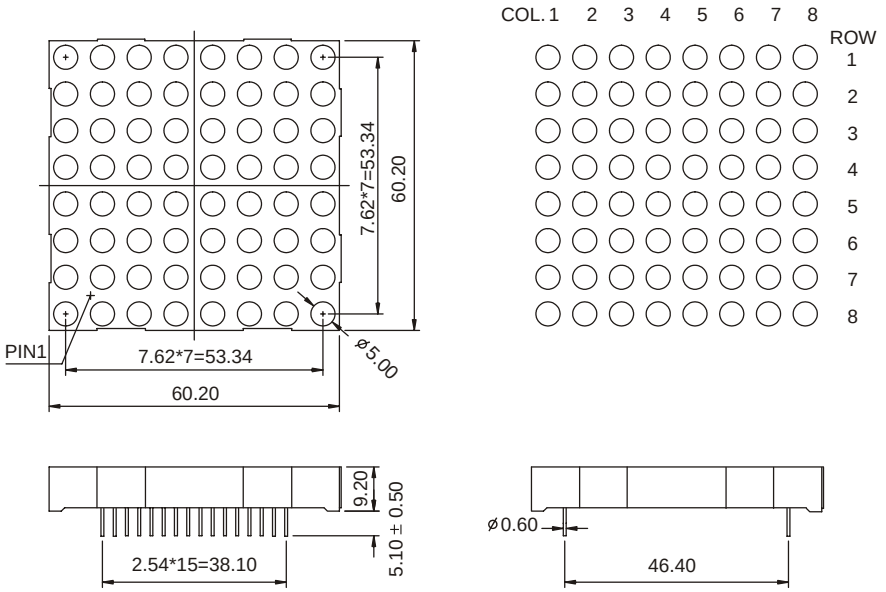
Features

- 60.20mm (2.30inch) digit high
- Dot size: Diameter 5.00 mm
- Pitch: 7.62 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

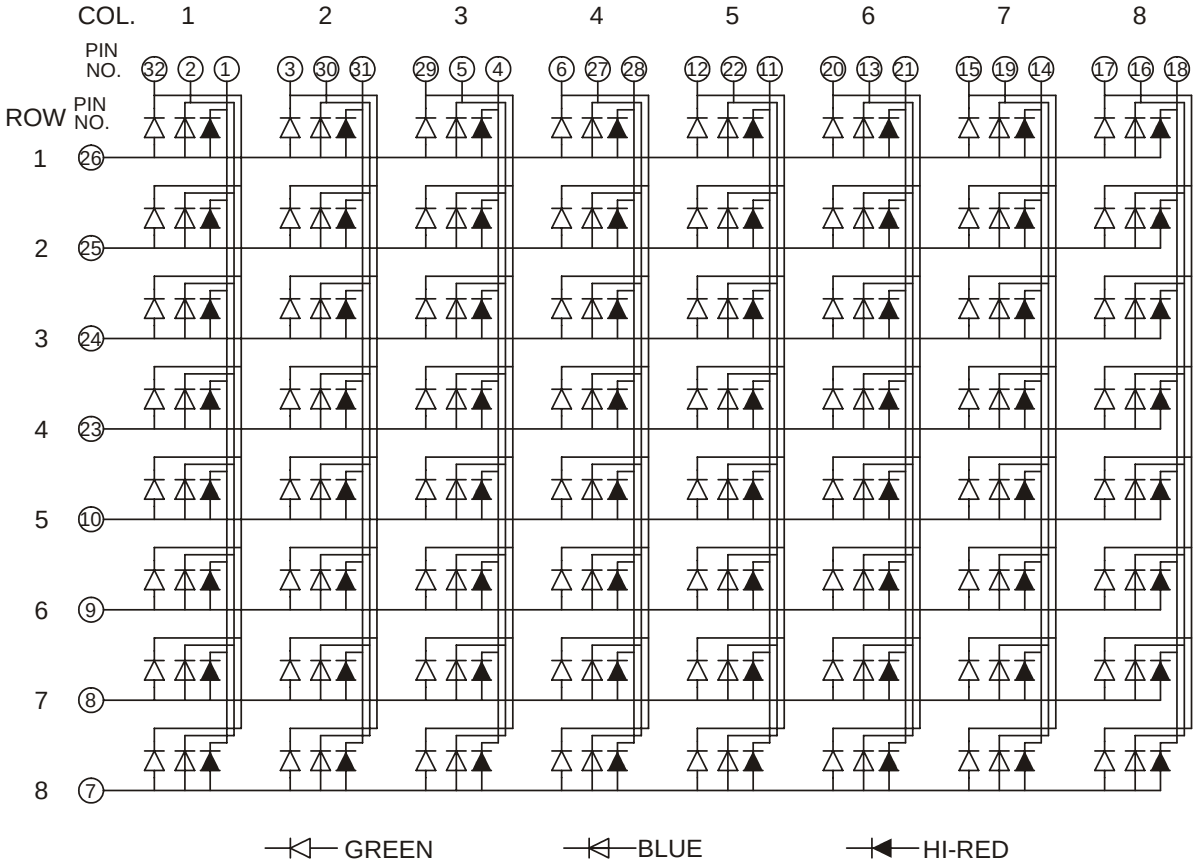


Notes:

1. All dimensions are in millimeters (inches), Tolerance is ± 0.25mm (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

LM23088BURPGUB (Common Anode Row)



Selection Guide

2.3 inch 8x8 BRGB LED dot matrix, Digit Height: 60.2mm(2.3inch), External Dimensions: 60.2x60.2x9.2 mm (L x W x H)								
Parameter	Part No.	Chip			Iv(mcd)@20mA		Iv(mcd)@20mA	
	Row Anode Column Cathode	Material	Color	W LD (nm)	One Dot		One Dot	
					Min.	Typ.	Min.	Typ.
High Brightness Dot Matrix	LM23088BURPGUB	AlGaInP	UR Ultra Red	640	30	35	60	70
		GaN	PG Pure Green	525	55	60	110	120
		GaN	UB Ultra Blue	470	35	45	70	100

Electrical Characteristics & Absolute Maximum Ratings

LM23088BURPGUB	Electrical optical Characteristics[1]			Absolute Maximum Ratings[1]			
Color	V_F(V) @ IF=20mA[2]		Reverse Current VR=5V (uA)	Power Dissipation (mW)	DC Forward Current (mA)	Peak Forward Current[3] (mA)	Reverse Voltage (V)
	Typ.	Max.					
UR Ultra Red	1.9	2.6	5	60	25	100	5
PG Pure Green	3.5	4.0	5	110	30	100	5
UB Ultra Blue	3.5	4.0	5	120	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.