LM30057A/BRG Series – 3.00 inch 5x7 Dual Color Dot Matrix LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

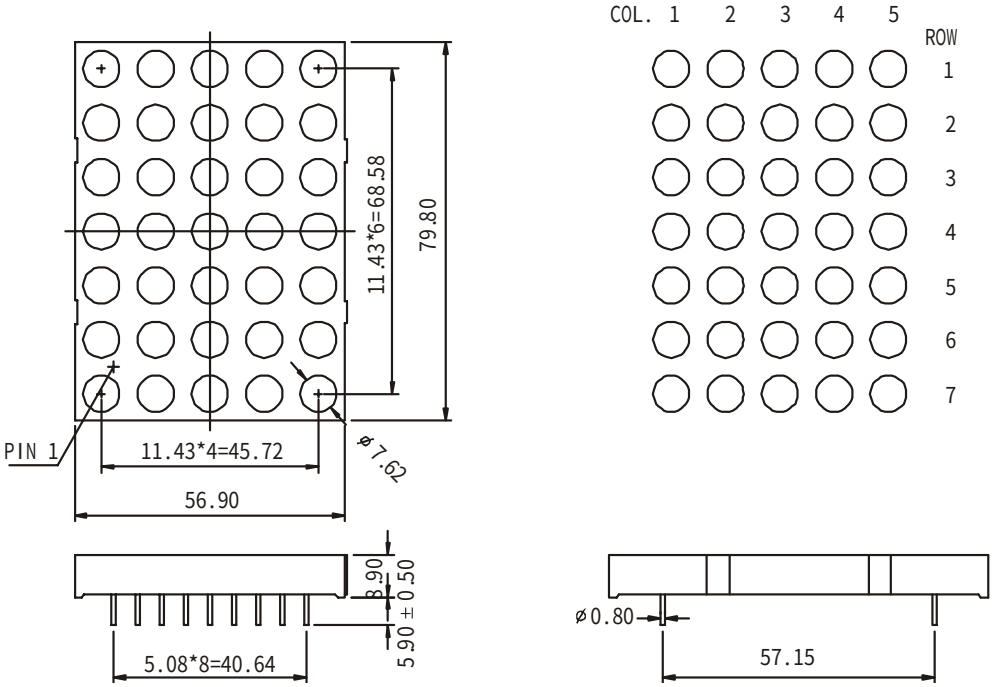
Features

- 79.80mm (3.00 inch) digit high
- Dot size: Diameter 7.62 mm
- Pitch: 11.43 mm
- Wide viewing angle
- Range of emitted colors
- 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

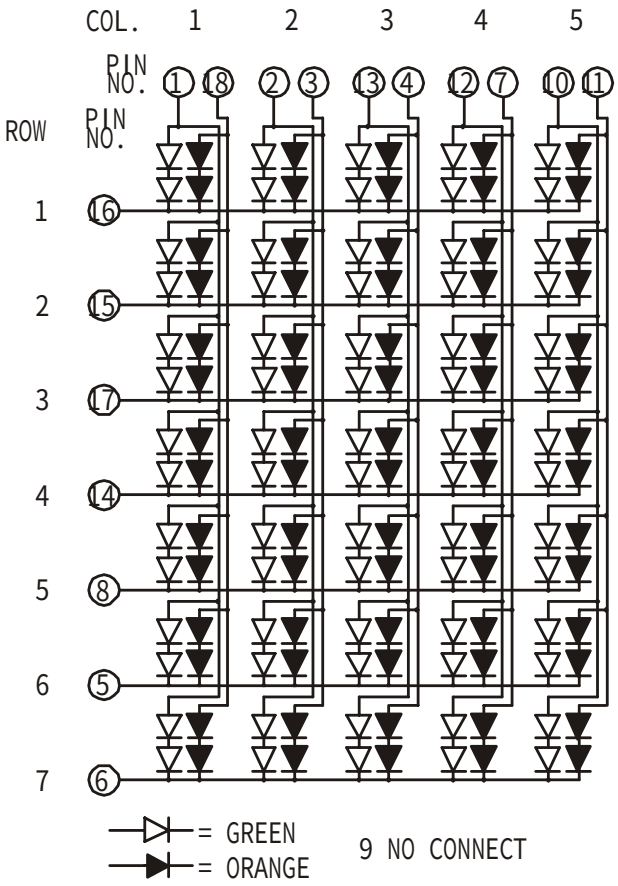


Notes:

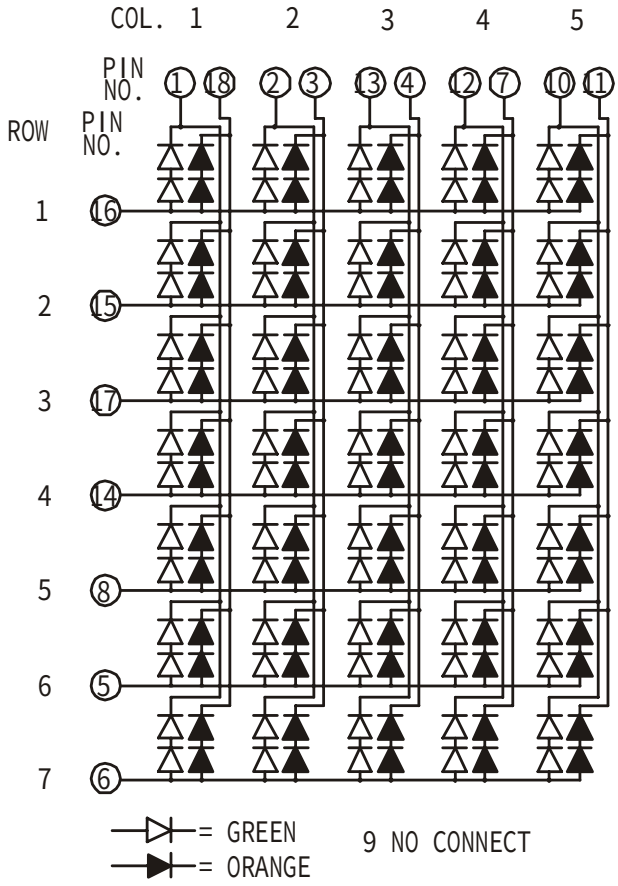
1. All dimensions are in millimeters (inches), Tolerance is ± 0.25mm (0.01inch) unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LM30057ARG (Common Cathode Row)



LM30057BRG (Common Anode Row)



Selection Guide

3.00 inch 5x7 Red-Green LED dot matrix module, Matrix Height: 79.80mm(3.00 inch), External Dimensions: 56.90x79.80x8.90mm (LxWxH)

Description	Part No.		Chip			Iv(mcd)@20mA	
	Cathode Row	Anode Row	Material	Color	W LD (nm)	One Dot	
						Min.	Typ.
Standard Brightness	LM30057ARG	LM30057BRG	GaAlAs	Super Red	640	12	15
			GaP	Green	568	10.5	13.5
Ultra-High Brightness	LM30057AURUG	LM30057BURUG	AlGaInP	Ultra Red	640	45	67.5
			AlGaInP	Ultra Green	573	45	67.5

Electrical Characteristics & Absolute Maximum Ratings

Color	Electrical optical Characteristics[1]			Absolute Maximum Ratings[1]			
	V_F(V) @ IF=20mA[3]		Reverse Current VR=5V(uA)	Power Dissipation (mW)	DC Forward Current (mA)	Peak Forward Current[3] (mA)	Reverse Voltage (V)
	Typ.	Max.					
Super Red	1.8	2.2	50	120	25	100	5
Green	2.2	2.5	50	160	30	100	5
Ultra Red	1.9	2.6	50	120	30	100	5
Ultra Green	2.1	2.6	50	150	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.