LM7057A/BRG Series - 0.70 inch 5x7 Dual Color Dot Matrix LED Display

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

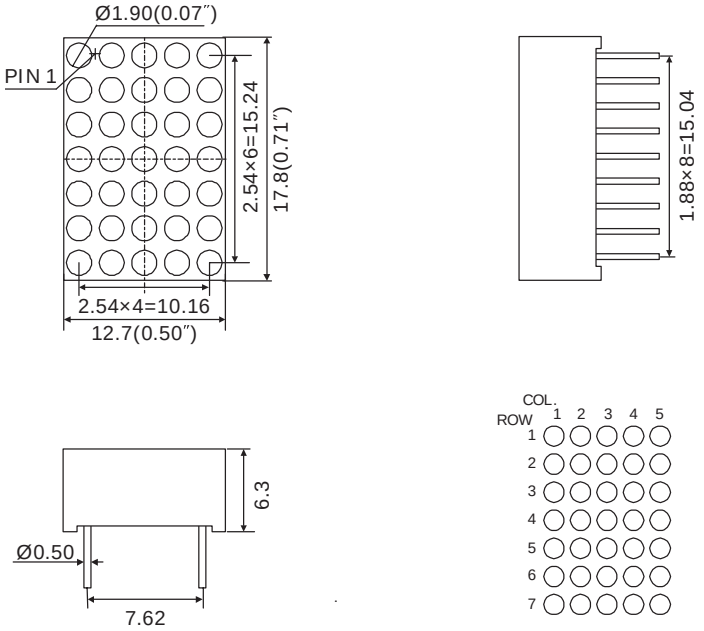
Features

- 17.80mm (0.70inch) digit high
- Dot size: Diameter 1.90mm
- Pitch: 2.54mm
- Wide viewing angle
- Emitting colors: red-green
- I.C. compatible
- Low power consumption
- White segment
- RoHS compliant

Available options

- Alternative emitting luminosity:
  Standard or high brightness version
- Alternative emitted color
- Alternative segment color
- Alternative font
- Common Cathode is available
- Cropped terminal pins

Package Dimensions

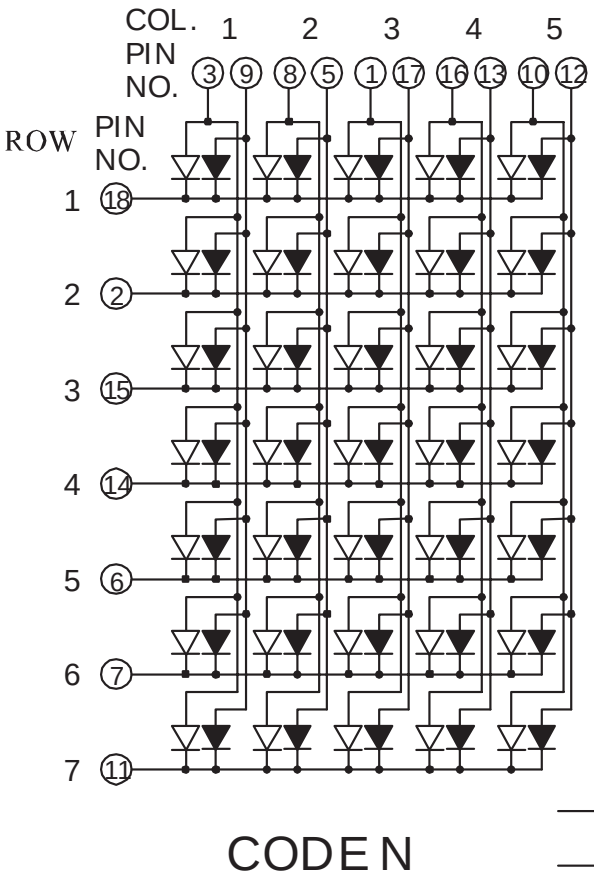


Notes:

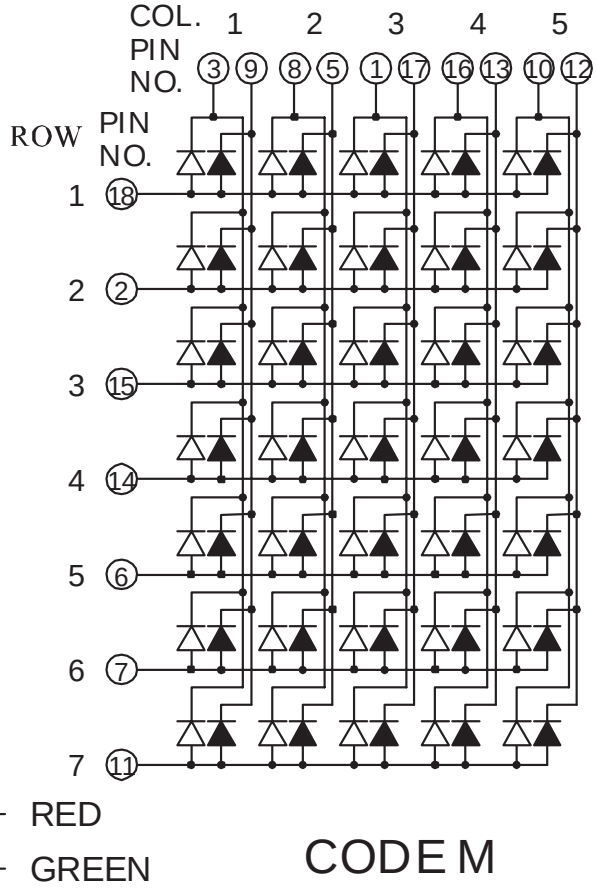
1. All dimensions are in millimeters (inches), Tolerance is ± 0.25mm (0.01inch) unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

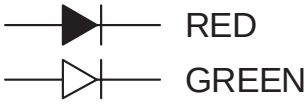
Internal Circuit Diagram

LM7057ARG (Common Cathode Row)



LM7057BRG (Common Anode Row)





Selection Guide

0.70 inch 5x7 Red-Green LED dot matrix module, Matrix Height: 17.80mm(0.70 inch), External Dimensions: 17.80x12.70x6.30mm (L x W x H)

Description	Part No.		Chip			Iv(mcd)@20mA	
	Common Cathode Row	Common Anode Row	Material	Color	W LD (nm)	One Dot	
						Min.	Typ.
Standard Brightness	LM7057ARG	LM7057BRG	GaAlAs	Super Red	640	8	10
			GaP	Green	568	7	9
Ultra-High Brightness	LM7057AURUG	LM7057BURUG	AlGaInP	Ultra Red	640	30	45
			AlGaInP	Ultra Green	573	30	45

Electrical Characteristics & Absolute Maximum Ratings per Dot

Color	Electrical optical Characteristics[1]			Absolute Maximum Ratings[1]			
	Forward Voltage(V) @ IF=20mA		Reverse Current VR=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.