LM12157C/D Series – 1.20 inch 5x7 Dot Matrix LED Display

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

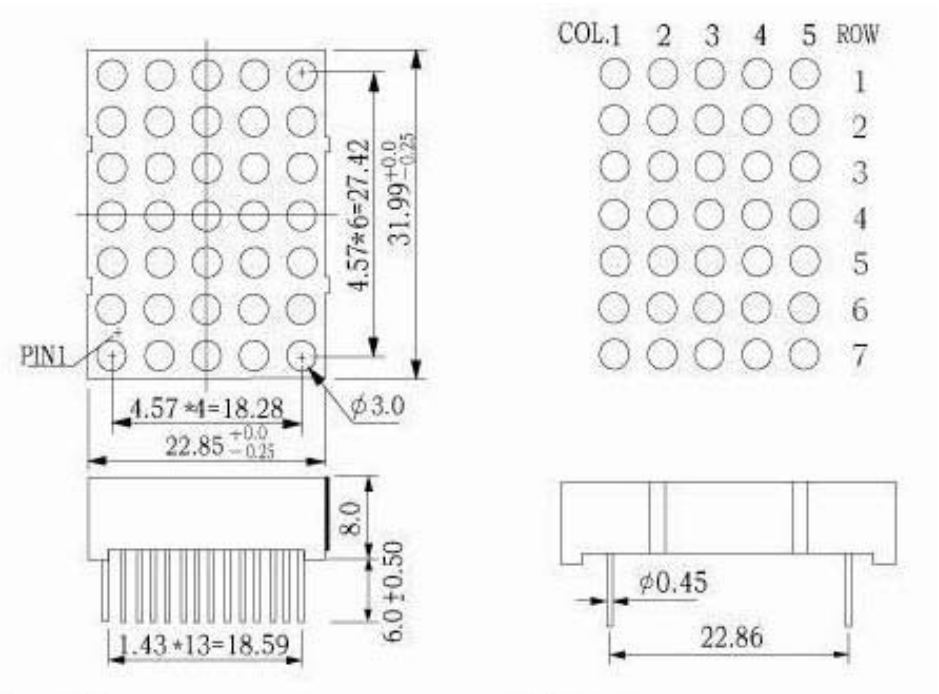
Features

- 31.99 mm (1.20 inch) digit high
- Dot size: Diameter 3.00mm
- Pitch: 4.57 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



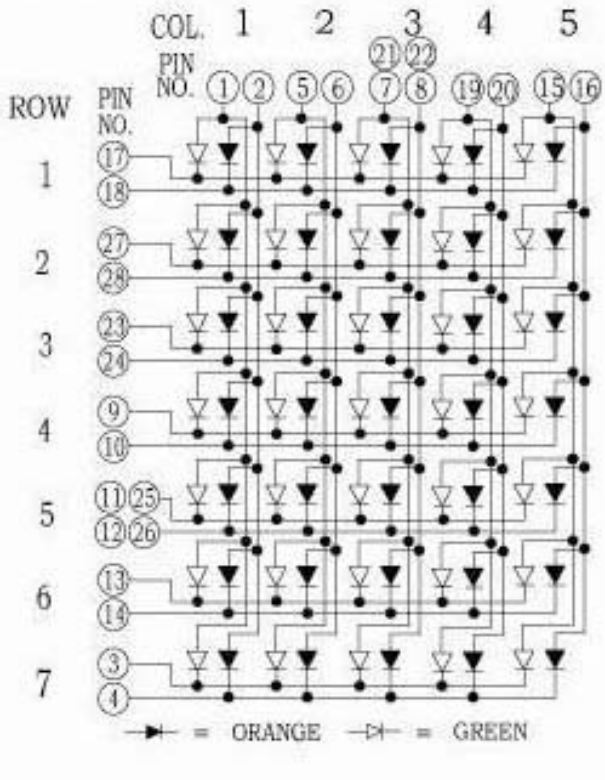
Notes:

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

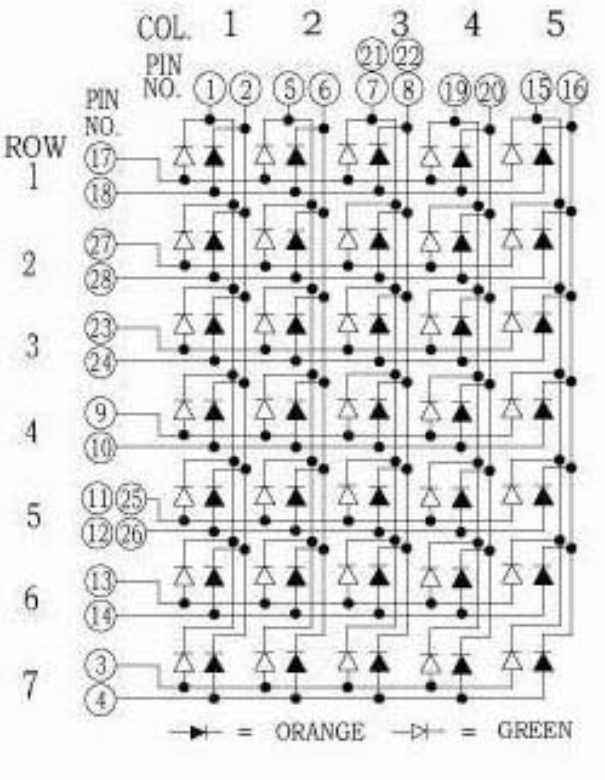
Common Cathode Row)

LM12157CRG



Common Anode Row

LM12157DRG



Selection Guide

1.2 inch 8x8 Red-Green LED dot matrix module, Matrix Height: 32mm(1.2inch), External Dimensions: 32x32x8mm (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	LM12157CRG	LM12157DRG	GaAlAs	Super Red	640	8	10
			GaP	Green	568	7	9
Ultra-High Brightness	LM12157CURUG	LM12157DURUG	AlGaInP	Ultra Red	640	30	45
			AlGaInP	Ultra Green	573	30	45

Electrical Characteristics & Absolute Maximum Ratings

LM12157C/DRG	Electrical Characteristics[1]			Absolute Maximum Ratings[3]			
Color	Forward Voltage(V) @ IF=20mA[2]		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	
Ultra Green	2.1	2.6	300	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.