LM12357A/B Series – 1.20 inch 5x7 Dot Matrix LED Display

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

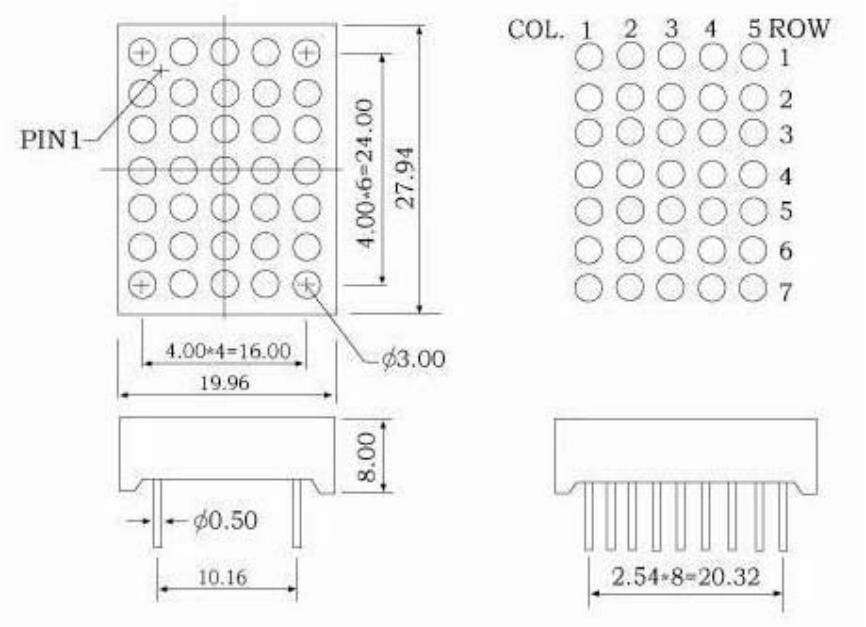
Features

- 27.94mm (0.70inch) matrix height
- Dot size: Diameter 3.00mm
- Pitch: 4.00mm
- 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 color
- Both CA or CC versions are available
- Cropped terminal pins

Package Dimensions

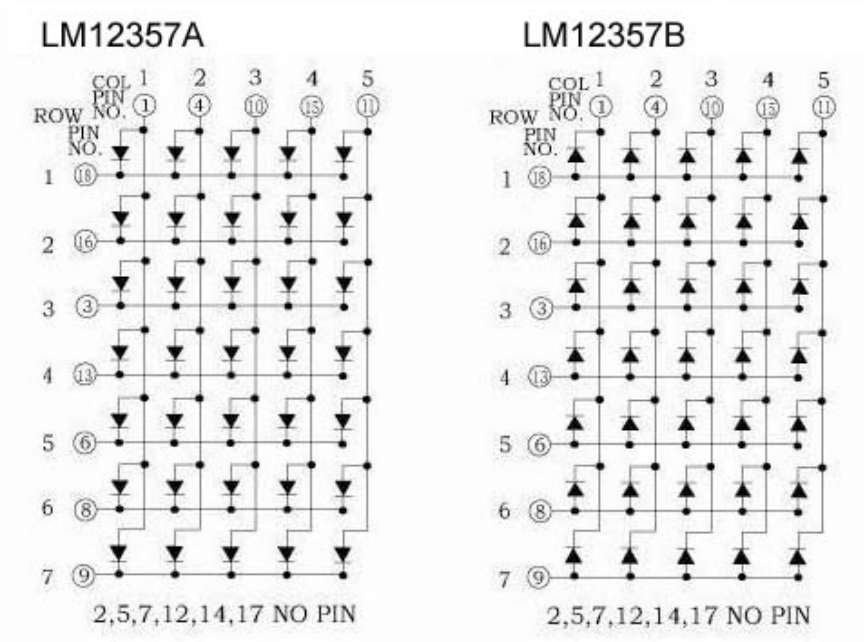


Notes:

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 **Common Anode Row**



Selection Guide

Part No.		Chip			Iv@IF=20mA	
Common Cathode Row	Common Anode Row	Material	Color	WLD	One Dot	
					Min.	Typ.
LM12357AR	LM12357BR	GaAlAs	Super Red	627	8	10
LM12357AD	LM12357BD	GaAlAs	Hi-Red	627	18	25
LM12357AO	LM12357BO	GaAsP	Orange	610	7	9
LM12357AY	LM12357BY	GaAsP	Yellow	588	8	10
LM12357AG	LM12357BG	GaP	Green	568	7	9
LM12357AUR	LM12357BUR	AlGaInP	Ultra Red	627	30	45
LM12357AUO	LM12357BUO	AlGaInP	Ultra Orange	610	45	60
LM12357AUA	LM12357BUA	AlGaInP	Ultra Amber	605	30	45
LM12357AUY	LM12357BUY	AlGaInP	Ultra Yellow	595	30	45
LM12357AUG	LM12357BUG	AlGaInP	Ultra Green	573	30	45
LM12357APG	LM12357BPG	InGaN	Pure Green	525	120	300
LM12357AUB	LM12357BUB	InGaN	Ultra Blue	470	30	45
LM12357AUW	LM12357BUW	InGaN	Ultra White	\	100	120
Unit:	\	\	\	nm	mcd	mcd

Electrical Characteristics & Absolute Maximum Ratings

Color		Electrical Characteristics[1]			Absolute Maximum Ratings[1]		
		V_F@ I_F=20mA[2]		Reverse Current VR=5V	Power Dissipation	DC Forward Current	Peak Forward Current[3]
		Typ.	Max.				
Super Red	Per Dot	1.8	2.2	30	60	25	100
Hi-Red	Per Dot	1.8	2.2	30	60	25	100
Orange	Per Dot	2.1	2.5	30	80	30	100
Yellow	Per Dot	2.1	2.5	30	80	30	100
Green	Per Dot	2.2	2.5	30	80	30	100
Ultra Red	Per Dot	1.9	2.6	30	60	30	100
Ultra Orange	Per Dot	2.0	2.6	30	65	30	100
Ultra Amber	Per Dot	2.0	2.6	30	65	30	100
Ultra Yellow	Per Dot	2.0	2.6	30	65	30	100
Ultra Green	Per Dot	2.1	2.6	30	75	30	100
Pure Green	Per Dot	3.5	4.0	30	110	30	100
Ultra Blue	Per Dot	3.5	4.0	30	120	30	100
Ultra White	Per Dot	3.5	4.0	30	120	30	100
Unit:	\	V	V	uA	mW	mA	mA

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.