
SPECIFICATIONS FOR DOT MATRIX DISPLAYS

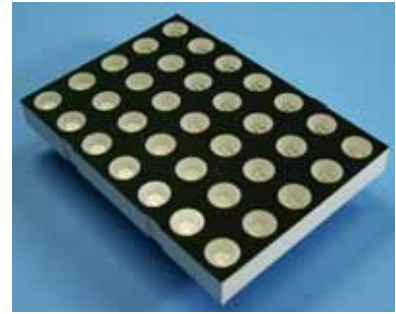
3.0" 5*7 Dot Matrix

[LMD30057 -15 Series](#)

WENRUN OPTOELECTRONIC

Features:

- Emitting dot 7.62mm diameter.
- High efficiency, low power consumption.
- Extremely low current.
- Low development cost.
- Big viewing angle vertically and horizontally.

**LMD30057A/B -15****Descriptions:**

- The LMD30057 is a 79.8mm (3.0") matrix height 5×7 dot matrix display.
- These devices are made with white dots and black surface.

Application

- Instrument panels.
- Digital read out display.

Selection Guide:

Part No.		Chip		Lens Color
Anode	Cathode	Material	Emitting Color	
LMD30057BSR-15	LMD30057ASR-15	GaAlAs	Super Red	Water clear
LMD30057BG-15	LMD30057AG-15	GaP	Green	
LMD30057BY-15	LMD30057AY-15	GaAsP/GaP	Yellow	
LMD30057BE-15	LMD30057AE-15	GaAsP/GaP	Orange	

Absolute Maximum Rating (Ta=25)

Parameter	Symbol	Super Red	Green	Yellow	Orange	Unit
Power Dissipation/Segment	P _d	100	120	120	120	mW
Peak Forward Current /Segment (Duty 1/10@ 1KHz)	I _{FP}	60	60	60	60	mA
Continuous Forward Current /Segment	I _F	20	20	20	20	mA
Recommend use current /Segment	I _F	5~10	5~10	5~10	5~10	mA
Reverse Voltage /Segment	V _R	8	8	8	8	V
Operating Temperature Range	Topr	-25~ +75				
Storage Temperature Range	Tstg	-30 ~ +85				
Solder Temperature	Tsol	260 ± 5				

Notes : 1、 This is the limit current. It is not allowed to use when the product work continuously.

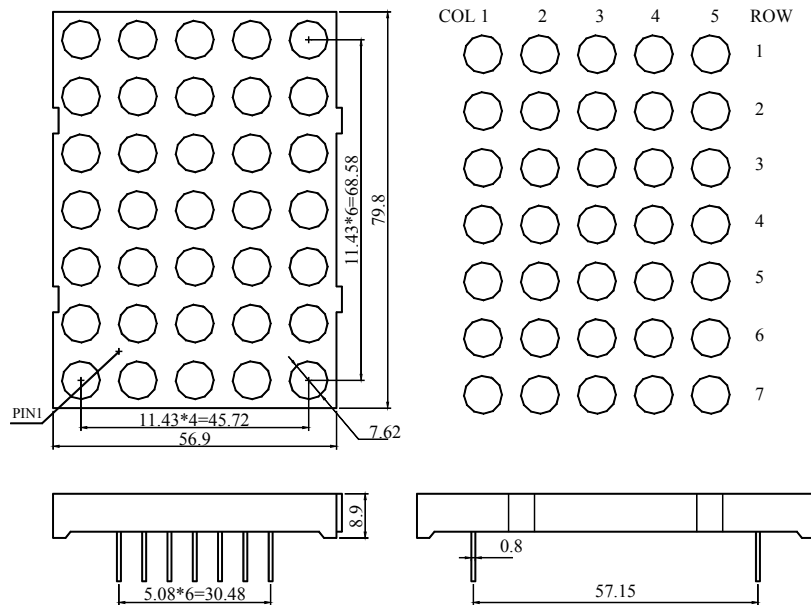
2、 It is recommended that the product is driven by TTL,CMOS .

3、 Soldering time 5 seconds.

Electrical Optical Characteristics (Ta=25)

Parameter	Symbol	Super Red		Green		Yellow		Orange		Unit	Test Condition
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.		
Luminous Intensity / Dot	I _v	27.0	--	14.0	--	14.0	--	14.0	--	mcd	I _F =10mA
Forward Voltage / Dot	V _F	3.7	4.6	4.4	5.0	4.0	5.0	4.0	5.0	V	I _F =20mA
Reverse Current / Dot	I _R	--	50	--	50	--	50	--	50	uA	V _R =5V
Dominant Wavelength	d	645	--	565	--	585	--	630	--	nm	I _F =20mA
Spectral Line Half Width		30	--	30	--	30	--	30	--	nm	I _F =20mA

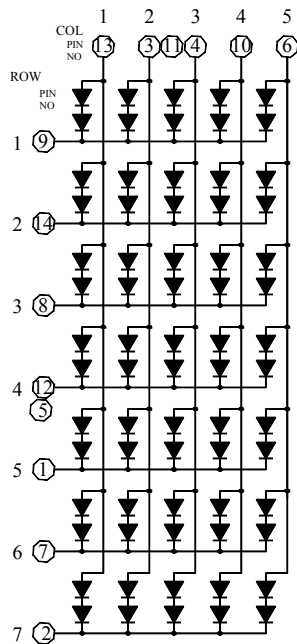
Package Dimensions:



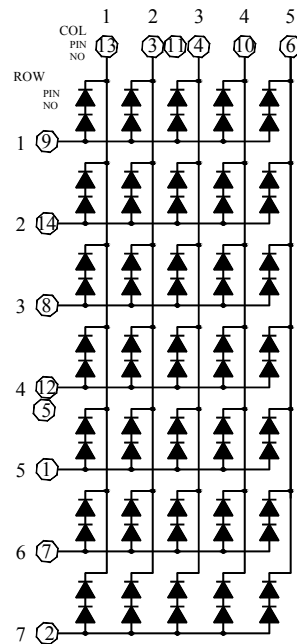
NOTES :

- All dimensions are in millimetres (mm), Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
- Specifications are subject to change without notice.

Internal Circuit:



LMD30057A



LMD30057B

Reliability Test Items and Conditions

NO	Test Item	Test Conditions	Duration	Sample	Ac/Re
1	Temperature Cycle	-30 ~ 25 ~ 85 ~ 25 30min 5min 30min 5min	50cycles	100	0/1
2	High Temp. Storage	Ta=85	1000hours	100	0/1
3	Temp.& Humidity Test	Ta=85 RH=85%	1000hours	100	0/1
4	Low Temp. Storage	Ta=-30	1000hours	100	0/1
5	Operating Life Test	Ta=25 ± 5 DC IF=15mA	1000hours	100	0/1
6	Solder Heat	Tsol=260 ± 5 , 5s	1times	20	0/1

Typical Electro-Optical Characteristics Curves

