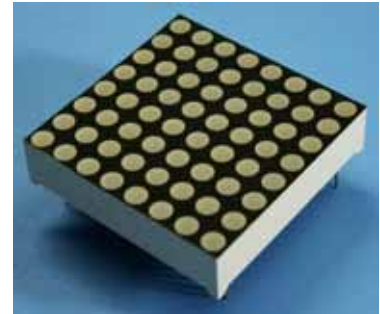


Features:

- Emitting dot 3.0mm diameter.
- High efficiency, low power consumption.
- Extremely low current.
- Low development cost.
- Big viewing angle vertically and horizontally.



LMD12088A/BSRG-10

Descriptions:

- The LMD12088 is a 32.0mm (1.2") matrix height 8×8 dot matrix display.
- These devices are made with white dots and black surface.

Applications:

- Instrument panels.
- Digital read out display.

Selection Guide:

Part No.		Chip		Lens Color
Anode	Cathode	Material	Emitting Color	
LMD12088BSRG-10	LMD12088ASRG-10	GaAlAs	Super Red	White Diffused
		GaP	Green	

Absolute Maximum Rating (Ta=25)

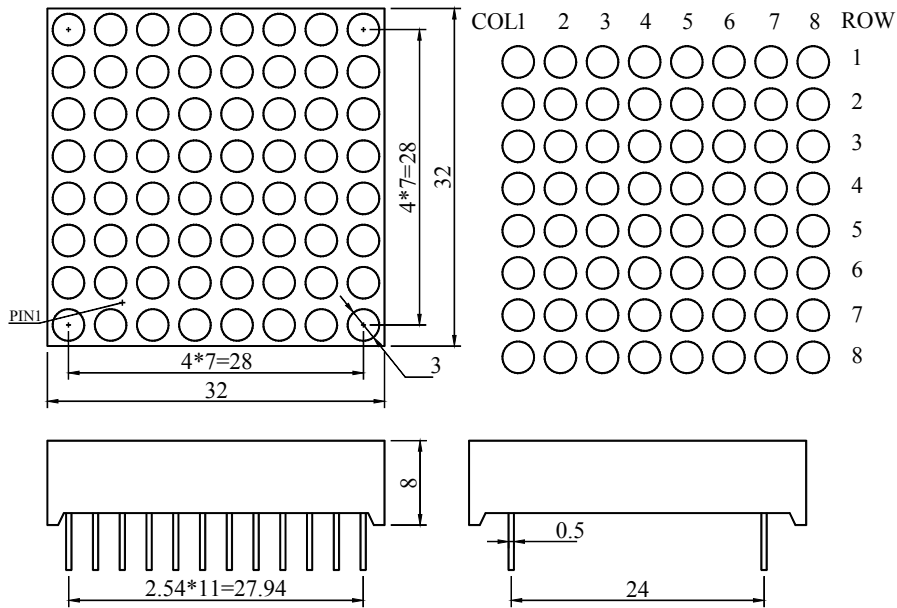
Parameter	Symbol	Super Red	Green	Unit
Power Dissipation/Segment	P_d	50	60	mW
Peak Forward Current /Segment (Duty 1/10@ 1KHz)	I_{FP}	70	70	mA
Continuous Forward Current /Segment	I_F	20	20	mA
Recommend use current /Segment	I_F	5~10	5~10	mA
Reverse Voltage /Segment	V_R	5	5	V
Operating Temperature Range	T_{opr}	-25~ +75		
Storage Temperature Range	T_{stg}	-30 ~ +85		
Solder Temperature	T_{sol}	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	Device	Typ.	Max.	Unit	Test Condition
Luminous Intensity / Dot	I_v	Super Red	9.1	--	mcd	$I_F=10mA$
		Green	4.5	--		
Forward Voltage / Dot	V_F	Super Red	1.85	2.3	V	$I_F=20mA$
		Green	2.2	2.5		
Reverse Current / Dot	I_R	Super Red	--	50	uA	$V_R=5V$
		Green	--	50		
Dominant Wavelength	d	Super Red	645	--	nm	$I_F=20mA$
		Green	565	--		
Spectral Line Half Width		Super Red	30	--	nm	$I_F=20mA$
		Green	30	--		

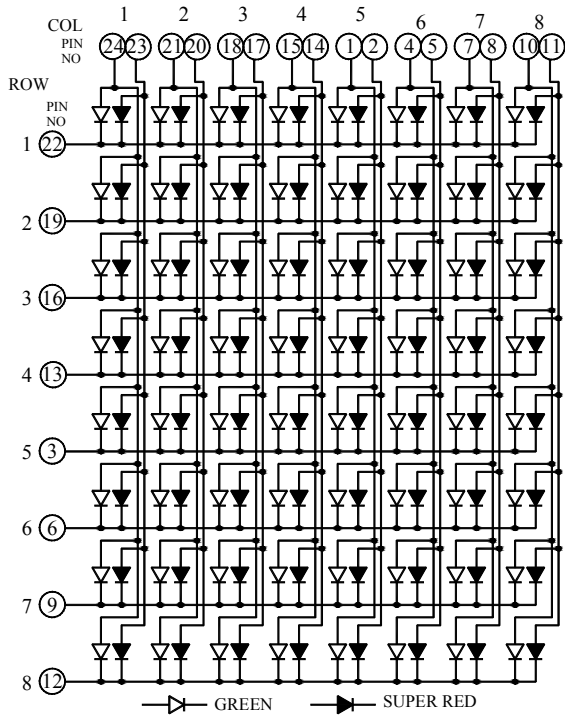
Package Dimensions:



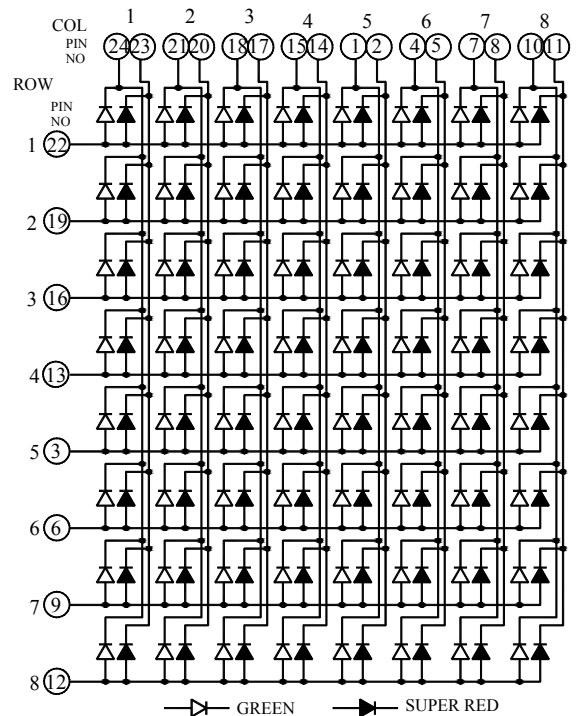
NOTES :

- 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:



LMD12088A



LMD12088B

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 , 10s	1times	20	0/1

Typical Electro-Optical Characteristics Curves

