

ZHONSHAN SILSMART OPTOELECTRONICS CO., LTD.

Device Number: JMM-200-001 REV: 1.0

5.0mm 8*8 Dot Matrix Displays

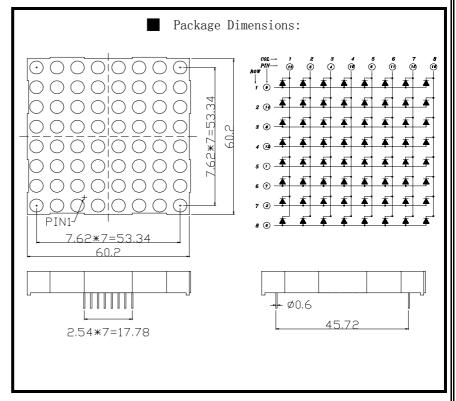
Model No.: **2088BS** ECN: Page: 1/4

Features:

- Large emitting dot 5.0mm diameter.
- Low power/high brightness.

Descriptions:

- The 2088 series is a large emitting area(5.0mm diameter)LED sources configured in a 64 dots 8*8 matrix array.
- These devices are made with white dots and gray surface.
- Applications:
- Instrument panels
- Digital read out display



Notes: 1.All dimensions are in millimetres

- 2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3. Tolerances unless Dimension ± 0.25 mm.

PART NO.	Chip		
PART NO.	Material	Emitted Color	
2088BS	GaAlAs	Super Red	

Addree: 4/F., Bld. C1, Fuwan Industrial Zone, Shiqi, Zhongshan, Guangdong, P. R. China

TEL: (+86 760) 8323449 8324139 Prepared by: Heron

FAX: (+86 760) 8321064 8324300 Prepared date: 04-2-20 E-mail:sales @ silsmart.com

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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	IF	30	mA
Power Dissipation	Pd	120	mW
Peak Forward Current	IF (Peak)	180	mA
Operating Temperature	Topr	-40 to +85	$^{\circ}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}$ C
Soldering Temperature	Tsol	$260~\pm~5$	$^{\circ}$
Reverse Voltage	\mathbf{V}_{R}	5	V

Note: *1:IFP Conditions --Pulse Width \leq 1msec and Duty \leq 1/10. *2:Soldering time \leq 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Peak Wavelength	λp	/	660	/	nm	IF= 20 mA
Dominant Wavelength	λd	/	643.0	/	nm	IF= 20 mA
Spectrum Radiation Bandwidth	Δλ	/	20	/	nm	IF= 20 mA
Forward Voltage	VF	/	1.8	/	V	IF= 20 mA
Luminous Intensity	IV	250	/	/	mcd	IF= 20 mA
Reverse Current	Ir	/	/	10	μА	V _R = 5 V

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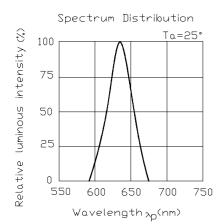
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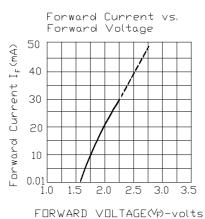
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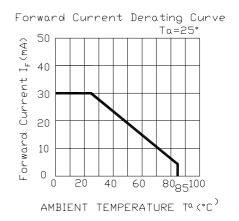
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Typical Electro-Optical Characteristic Curves:

(R)







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Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100℃ 15min ∫ 5 min L : -40℃ 15min	300 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	300 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : −40°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25℃ I _F = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature/ High Humidity	85℃ / 85% RH	1000 HRS	76 PCS	0/1

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