CHINA
SEMICONDUCTOR
CORPORATION

Spec. No.	PS-N329SB4-B0R
Rev.	A

PRODUCT SPECIFICATION

Model No：CSPR-N329SB4-B0R

Descriptions:
• LED Type : Superbright Lamp
• LED Package : Piranha LED Lamp
• Emitting Color : Blue
• Viewing Angle : 50°
• Stopper

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No：CSPR-N329SB4-B0R

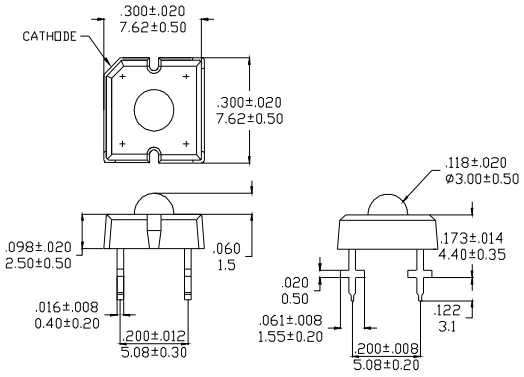
■ Features -

1. High Current Operation
2. High Luminous Output
3. High Reliability and Solid
4. Optimal Optical/Mechanical Design
5. Packaged in Tubes for Use with Automatic Pick and Place Equipment
6. Rohs Compliant

■ Device Selection Guide -

Part No.	Chip		LED Lens
	Material	Emitted Color	
CSPR-N329SB4-B0R	InGaN	Blue	Water Transparent

■ Package Outline Dimensions -



＊Tolerance：±0.25[0.01]　　Unit：±mm[inch]

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■ Absolute Maximum Rating -

(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	120	mW
Forward Current (DC)	I_F	40	mA
Peak Forward Current *	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temp.	Topr	-30 ~ +80	℃
Storage Temp.	Tstg	-40 ~ +100	℃
Lead Soldering Temperature	Tsol	Max. 260 ℃for 5 sec Max. (3mm from the epoxy bulb)	

* Pulse width ≦0.1 msec. duty ≦1/10

■ Electro-optical Characteristics -

(Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	V_F	-----	3.5	4.0	V	I_F=30mA
Luminous Flux	Φv	600	1400	-----	mlm	
Dominant Wavelength	λd	-----	465	------		
Viewing Angle	2θ 1/2	-----	50	-----	deg	
Reverse Current	I_R	-----	-----	50	μA	V_R=5V

Model No：CSPR-N329SB4-B0R

■ Luminous Flux Rank Limits (I_F = 30mA)

unit：mlm

Part No. / Code	CSPR-N329SB4-B0R	
	min.	max.
A	600	1000
B	1000	1500
C	1500	2000
D	2000	2500
E	2500	3000

■ Dominant Wavelength Rank Limits (I_F = 30mA)

unit：nm

Part No. / Code	CSPR-N329SB4-B0R	
	min.	max.
B5	460	465
B6	465	470
B7	470	475

■ Forward Voltage Rank Limits (I_F = 30mA)

unit：V

Part No. / Code	CSPR-N329SB4-B0R	
	min.	max.
J	3.0	3.2
K	3.2	3.4
L	3.4	3.6
M	3.6	3.8
N	3.8	4.0

Notes:

1. Tolerance of measurement of luminous Flux :±15 %
2. Tolerance of measurement of dominant wavelength :±2nm
3. Tolerance of measurement of forward voltage :±0.05v
4. All data are measured by CSC's test equipment.
5. One delivery will include several color rank, VF rank and Iv ranks of the products.
6. The quantity-ratio of the ranks is decided by CSC.
7. Please confirm with CSC salesman,if your request different form standard specification.

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■ Typical Electrical / Optical Charateristics Curves -

(Ta = 25℃ Unless Otherwise Noted)

Fig 1. Forward Current Vs. Forward Voltage

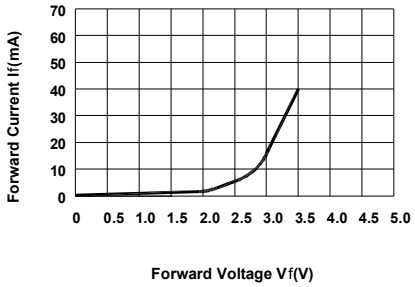


Fig 2. Relative Luminous Flux Vs. Forward Current

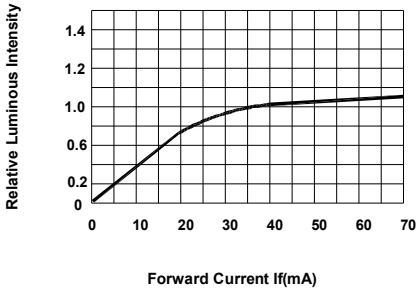


Fig 3. Foward Current Vs. Ambient Temperature
(Rθ j-a=300°C/W)

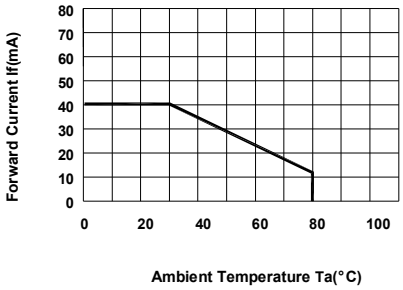


Fig 4. Relative Intensity Vs. Wavelength

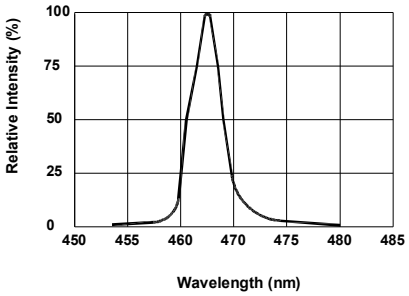
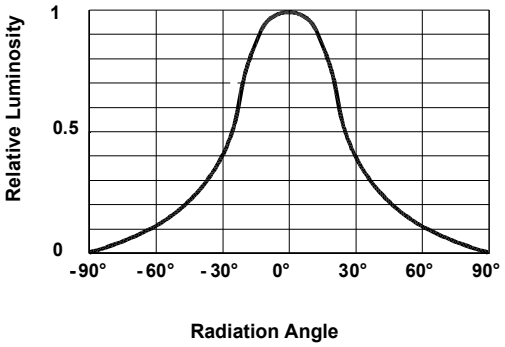


Fig 5. Radiation Diagram



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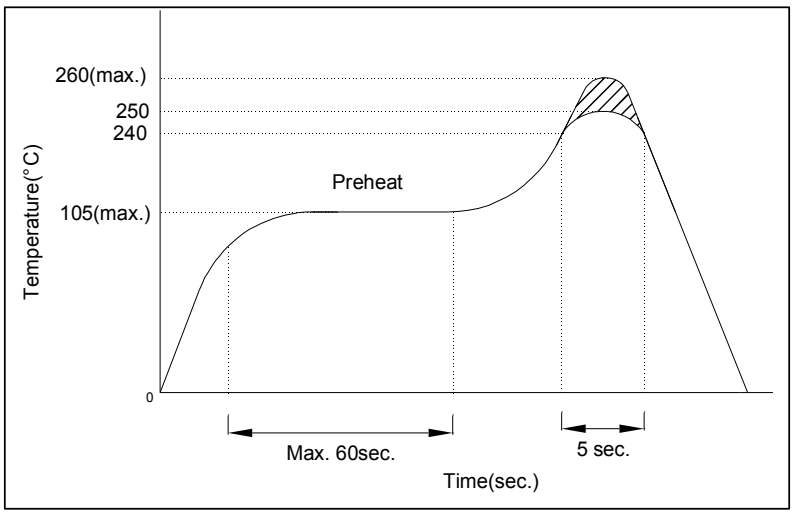
■ Precautions For Use -

1. Recommended Soldering conditions

Wave Soldering



2. Soldering Iron

Basic SPEC. is ≦5sec. When 260℃. If temperature is higher, time should be shorter (+10℃→ -1sec.). Power dissipation of iron should be smaller than 15W , and temperature should be controllable. Surface temperature of the device should be under 230℃.

3. Static Electricity

a. Static electricity or surge voltage damages LEDs..
It is recommended that a wrist band or an anit-electrostatic glove be used when handling the LEDs.

b. All devices, equipment and machinery must be properly grounded. It is recommended that mesures be taken against surge voltage to the equipment that mounts the LEDs.

■ Revision History

Rev. NO	Date	Change Description
A	2009-7-29	

CSC has the right to updata the information without notice,
Please confirm with CSC salesman for the latest version.