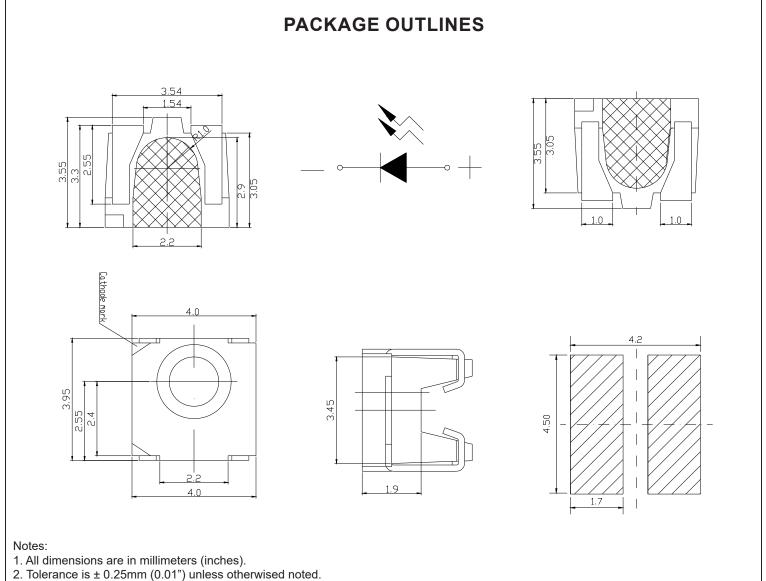


#### SPECIFICATION

# **CSPR1616B2C**



3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSPR1616B2C	InGaN	Blue	Water Clear	120°



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### **ABSOLUTE MAXIMUM RATINGS**

#### (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	lF	30	mA
Reverse Current @ 5V	lR	10	μA
Power Dissipation	Pd	110	mW
Operating Temperature Range	Тор	-40~+85	°C
Storage Temperature Range	Тѕтс	-40~+90	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	lfp	100	mA
Soldering Temperature	TSOL	Max 260°C for 10 sec Max	

# **OPTICAL-ELECTRICAL CHARACTERISTICS**

Value Parameter Symbol **Test Condition** Unit Min Тур Max 300 Luminous Intensity Iv IF = 20mA\_ mcd Forward Voltage IF = 20mAV VF 3.35 3.95 -Reverse Leakage Current VR = 5VIR 50 -\_ μA Viewing Angle at 50% Iv  $2\theta 1/2$ IF = 20mA120 \_ Deg \_ **Dominant Wavelength** λd IF = 20mA464 476 \_ nm Peak Wavelength IF = 20mA468 λp \_ \_ nm \*Tolerance of viewing angle: -10 / +5 deg.

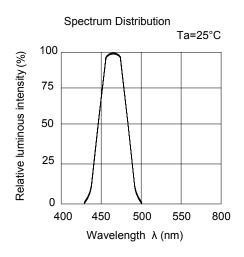


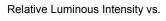
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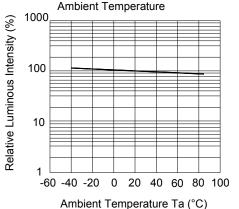
## (TA=25°C)



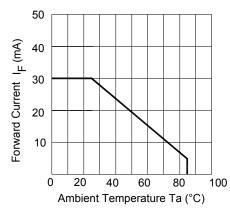
### **OPTICAL CHARACTERISTIC CURVES**

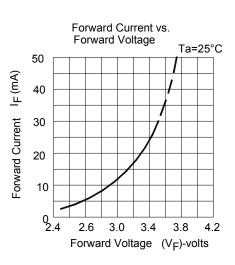




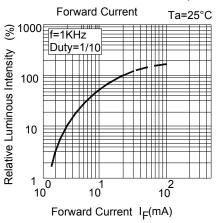


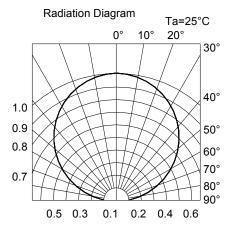






Relative Luminous Intensity vs







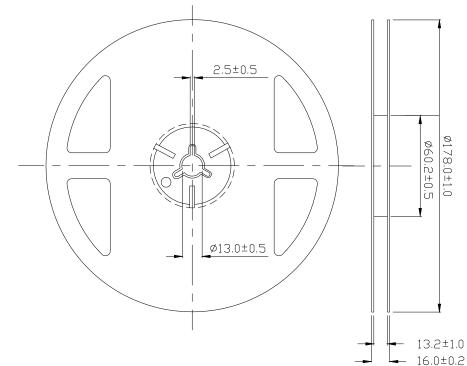
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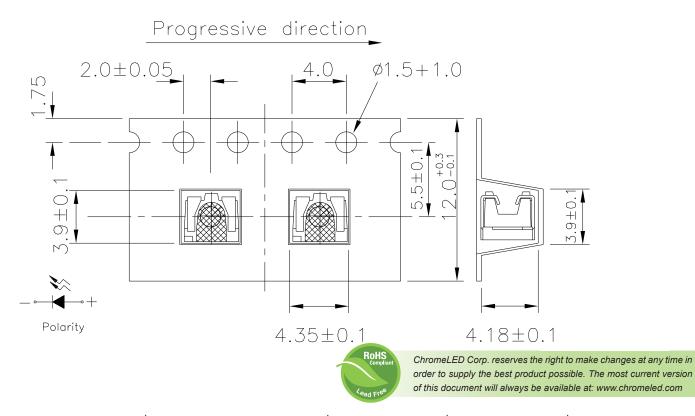


# PACKAGING SPECIFICATION

#### **Reel Dimensions**



Carrier Tape Dimensions: Loaded Quantity 500 pcs. Per Reel





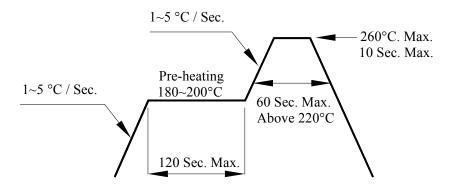
#### **SOLDERING CONDITIONS**

#### **Precautions for Use**

1. Over-current-proof

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

- 2. Storage
  - 2.1 Do not open moisture proof bag before the products are ready to use.
  - 2.2 Before opening the package: The LEDs should be kept at  $30^{\circ}$ C or less and 90%RH or less.
  - 2.3 After opening the package: The LED's floor life is 168 hours under 30°C or less and 60% RH or less. If unused LEDs remain, it should be stored in moisture proof packages.
  - 2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions. Baking treatment : 60±5°C for 24 hours.
- 3. Soldering Condition
  - 3.1 Pb-free solder temperature profile



- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.



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