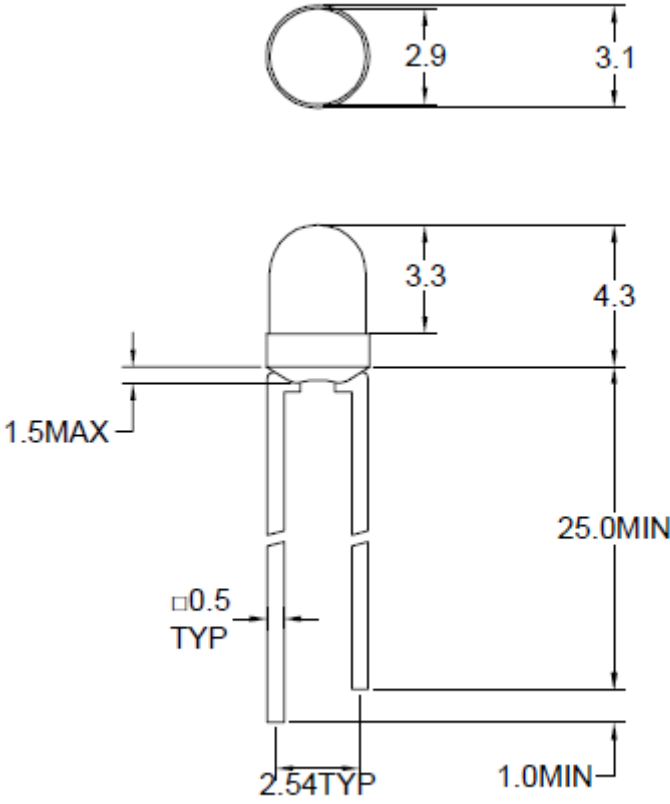


SPECIFICATIONS **CL28W3C**

OUTLINES DIMENSIONS



The technical drawing shows two views of the LED package. The top view is a cylinder with a diameter of 2.9 mm and a length of 3.1 mm. The side view shows a package with a total height of 4.3 mm. The lens height is 3.3 mm. The mounting tab height is 1.5 mm maximum. The mounting tab width is 2.54 mm typical. The mounting tab thickness is 0.5 mm typical. The mounting tab length is 1.0 mm minimum. The mounting tab is 25.0 mm minimum from the bottom of the package.

Notes:

1. All Dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CL28W3C	InGaN/GaN	White	Water Clear	40°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	120	mW
Pulse Current Forward Current	IFP	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	TOPR	-20~+80	°C
Storage Temperature Range	TSTG	-30~+100	°C
IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec			

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	1500	2700	-	mcd
Forward Voltage	VF	IF = 20mA	-	3.5	3.6	V
Reverse Leakage Current	IR	VR = 5V	-	50	-	µA
Viewing Angle	2θ1/2	IF = 20mA	-	40	-	deg
Chromaticity Coordinates	X	IF = 20mA	-	0.28	-	-
Chromaticity Coordinates	Y	IF = 20mA	-	0.28	-	-

*Tolerance of viewing angle: -10 / +5 deg.



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OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

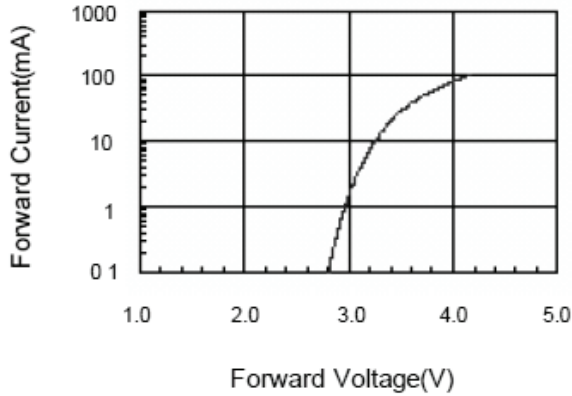


Fig.2 Relative Intensity vs. Forward Current

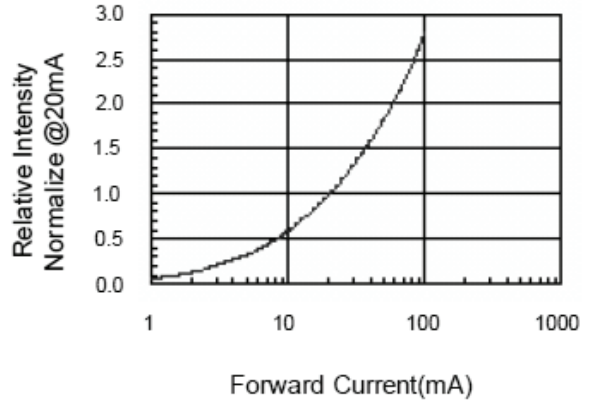


Fig.3 Forward Voltage vs. Temperature

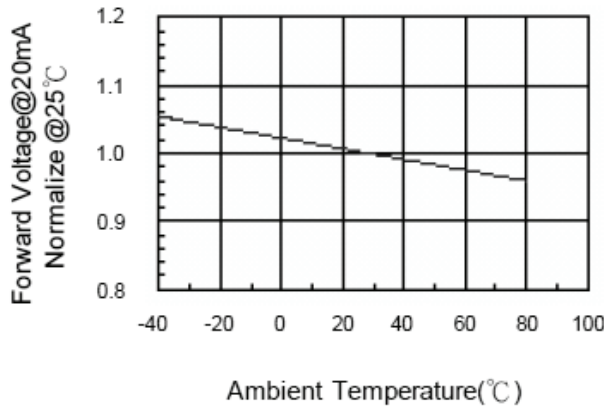
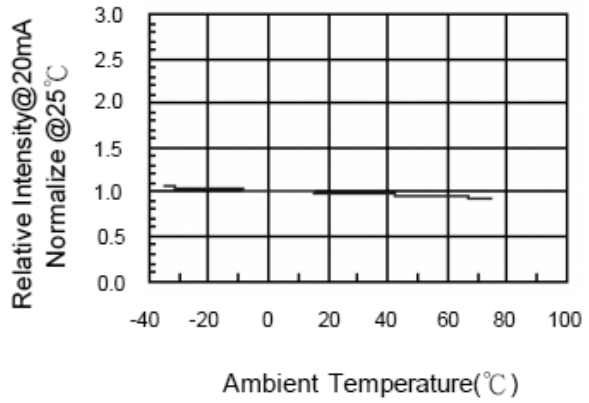
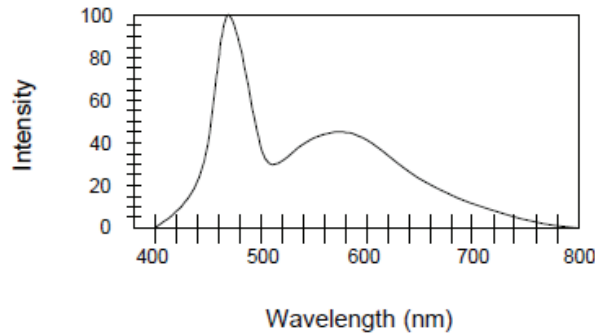


Fig.4 Relative Intensity vs. Temperature



SPECTRAL RADIANCE



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SOLDERING CONDITIONS – LAMP TYPE LED

SOLDERING CONDITION (Pb-Free)

1. Iron:

Soldering Iron: 30W Max

Temperature 350°C Max

Soldering Time: 3 Seconds Max (One Time only)

Distance: 2mm Min (From solder joint to body)

2. Wave Soldering Profile

Dip Soldering

Preheat: 120°C Max

Preheat time: 60 seconds Max

Ramp-up

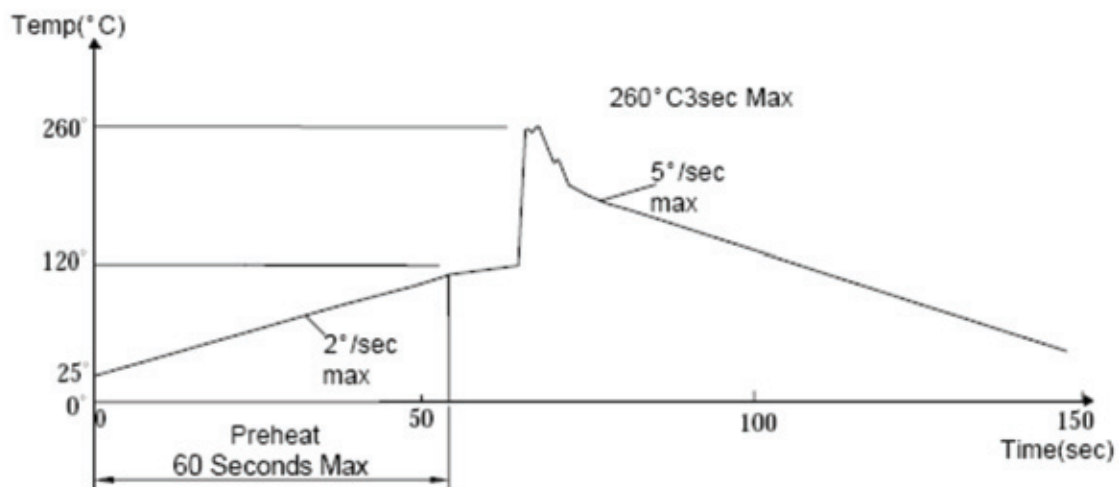
2°C/sec (Max)

Ramp-Down: -5°C/sec (Max)

Solder Bath: 260°C Max

Dipping Time: 3 seconds Max

Distance: 2mm Min (from solder joint to body)



Note: 1. Wave solder should not be made more than one time.

2. You can only select one of the soldering conditions above.



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