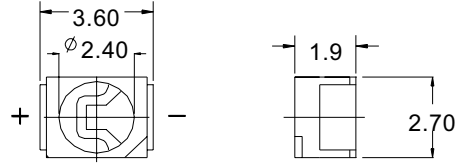


L-TWH1-B01 : ULTRA BRIGHTNESS SMD LED

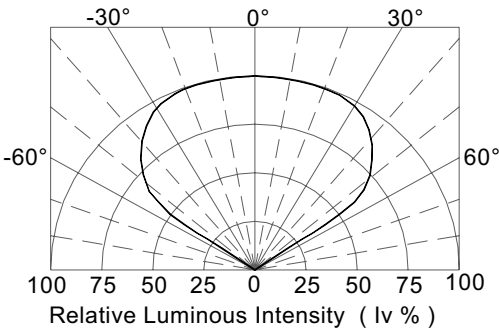
PACKAGE CONFIGURATION

DESCRIPTION

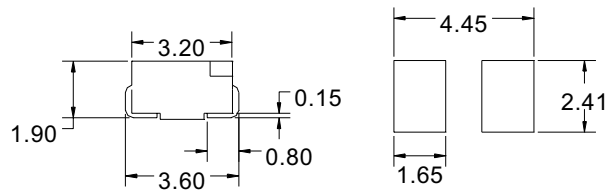
Dice Material : GaN Blue
 Light Color : White Color
 Lens Color : Water Transparent



RADIATION PATTERN



INFRARED/VAPOR PHASE REFLOW SOLDERING



Tolerance ± 0.25

ABSOLUTE MAXIMUM RATINGS AT Ta = 25

PARAMETER	MAX.	UNIT
Power Dissipation	80	mW
Continuous Forward Current	20	mA
Peak Forward Current (1/10 Duty Cycle , 0.1ms Pulse Width)	80	mA
Reverse Voltage	5	V
Derating Linear From 50	0.35	mA/°C
Operating Temperature Range	40 to 100	°C
Storage Temperature Range	40 to 100	°C
Reflow Soldering Condition 230 for 10 seconds		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V _F	Forward Voltage	I _F = 20 mA		3.4	4	V
I _R	Reverse Current	V _R = 5V			2	A
2 1/2	Viewing Angle	I _F = 20 mA		110		Deg

BIN GRADE LIMITS (I F = 20 mA) CHROMATICITY COORDINATES

WA	x	0.26	0.26	0.29	0.29	WC	x	0.32	0.32	0.35	0.35
	y	0.19	0.23	0.27	0.23		y	0.28	0.32	0.35	0.31
WB	x	0.29	0.29	0.32	0.32	WD	x	0.35	0.35	0.38	0.38
	y	0.23	0.27	0.32	0.28		y	0.31	0.35	0.4	0.36

One delivery will include three different ranks of products.

Measurement Uncertainty of the color coordinates : ±0.02

BIN GRADE LIMITS (I F = 20 mA) LUMINOUS INTENSITY / mcd

Bin	D	E	F	G	H	I
Min.	218	280	360	465	600	780
Max.	280	360	465	600	780	1000

Measurement Uncertainty of the Luminous Intensity : ± 15 %

*These products are sensitive to static electricity.

Caution must be taken strictly to avoid static electricity.

*Chromaticity Coordinates , x,y is according to CIE Chromaticity Diagram base on color of lamps.

* 1/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.

LIGHT EMITTING DIODE

GaN White LED

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current Vs. Forward Voltage

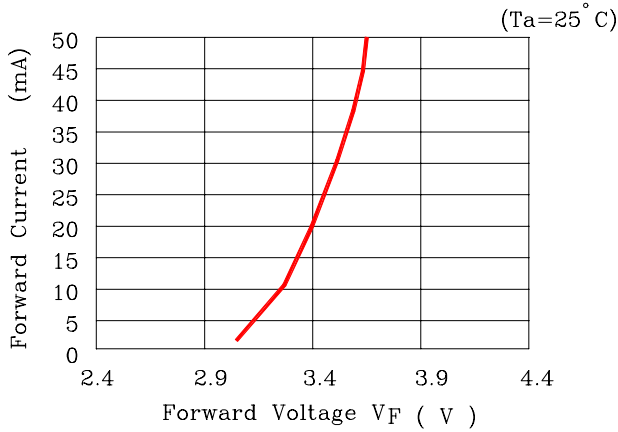


FIG. 2 Relative Intensity Vs. Forward Current

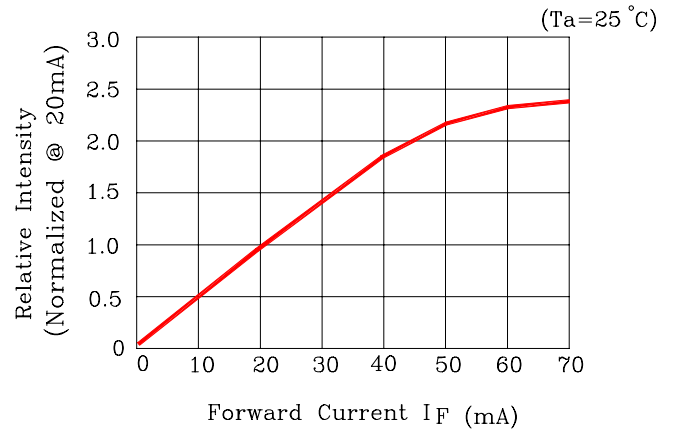


FIG. 3 Forward Voltage VS. Temperature

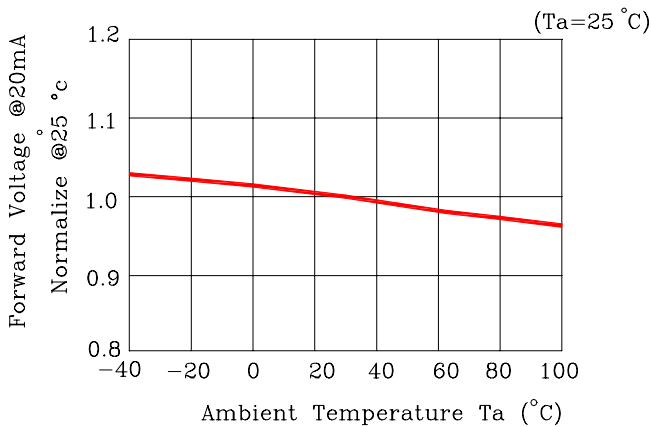


FIG. 4 Relative Intensity vs. Temperature

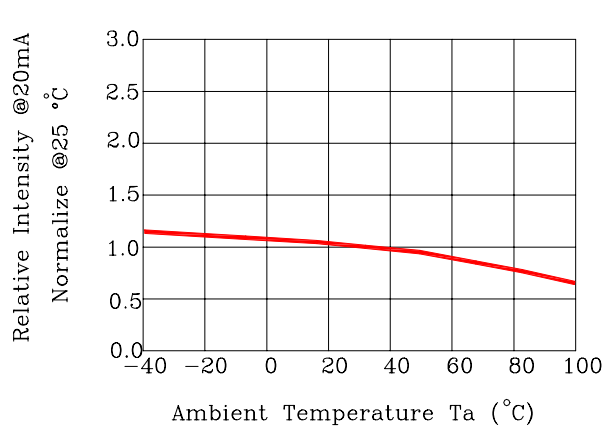


FIG. 5 Relative Intensity vs. Wavelength (λ_p)

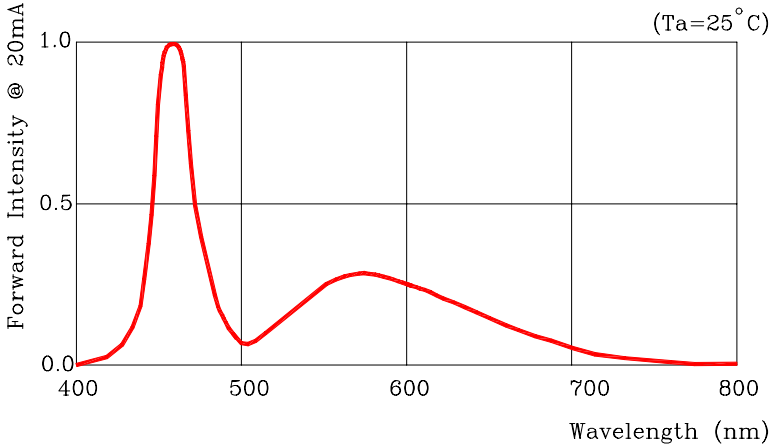


FIG. 6 Maximum Forward Current vs. Ambient Temperature. Derating Based on $T_{MAX}=130^\circ\text{C}$

