



广州市拓然光电科技有限公司
GUANGZHU TUORAN LIGHTING CO., LTD

SPECIFICATION

PART NO. :

RELEASE DATE : 2023

VERSION : A

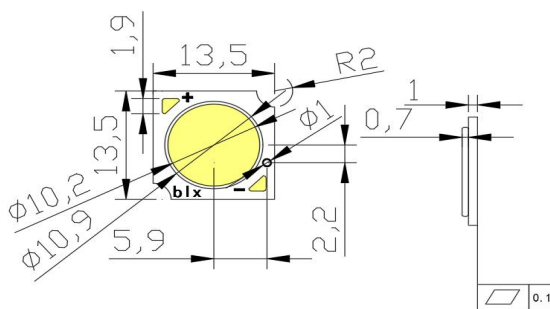


Approved by

Checked by

Prepared by

Package Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.25 unless otherwise noted.

Description

Part No.	LED Chip		Silica gel Color
	Material	Emitting Color	
TR-C1411-0302-3W-D	AL/GaN /GaN	White	Water Clear

Electrical/Optical Characteristics (At $T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Conditions	Min.	Avg.	Max.	Units	
Luminous Flux	Φ	$I_F=300\text{mA}$	330	-	360	lm	
Color Temperature	CCT	$I_F=300\text{mA}$	5500	5700	6000	K	
CRI	Ra	$I_F=300\text{mA}$	80	-	--	-	
Forward Voltage	V_F	$I_F=300\text{mA}$	9	-	11	V	
Thermal Resistance Junction To Board	$R\Theta_{J-B}$	$I_F=300\text{mA}$	—	10	—	$^{\circ}\text{C}/\text{W}$	
Temperature Coefficient of Forward Voltage	$\Delta V_F/\Delta T$	$I_F=300\text{mA}$	—	2	—	$\text{mV}/^{\circ}\text{C}$	
Reverse Current	I_R	$V_R=7\text{V}$	—	—	5	μA	
Viewing Angle ^[1]	$2\Theta_{1/2}$	$I_F=300\text{mA}$	—	120	—	Deg	

Absolute Maximum Rating(At $T_A=25^{\circ}\text{C}$)

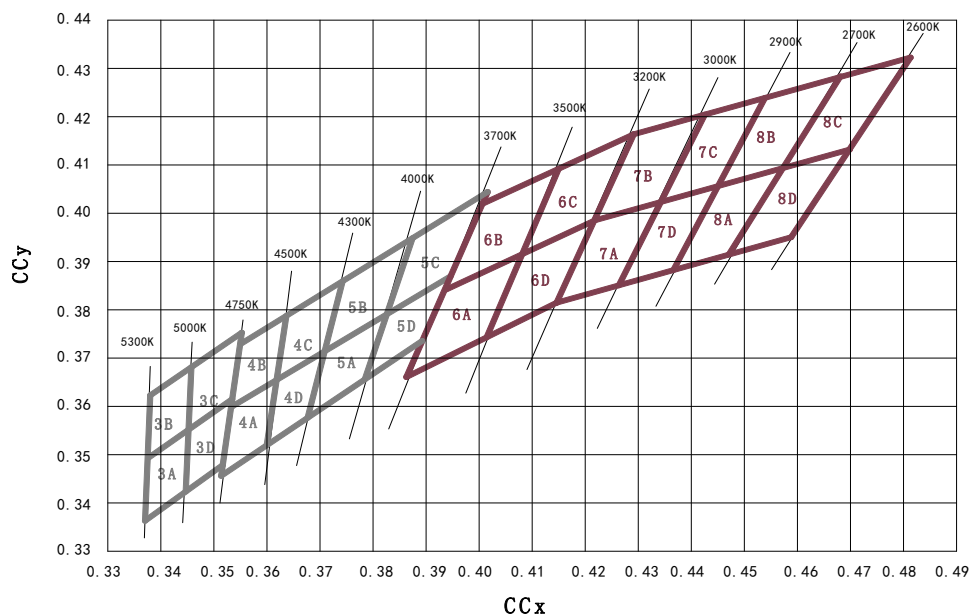
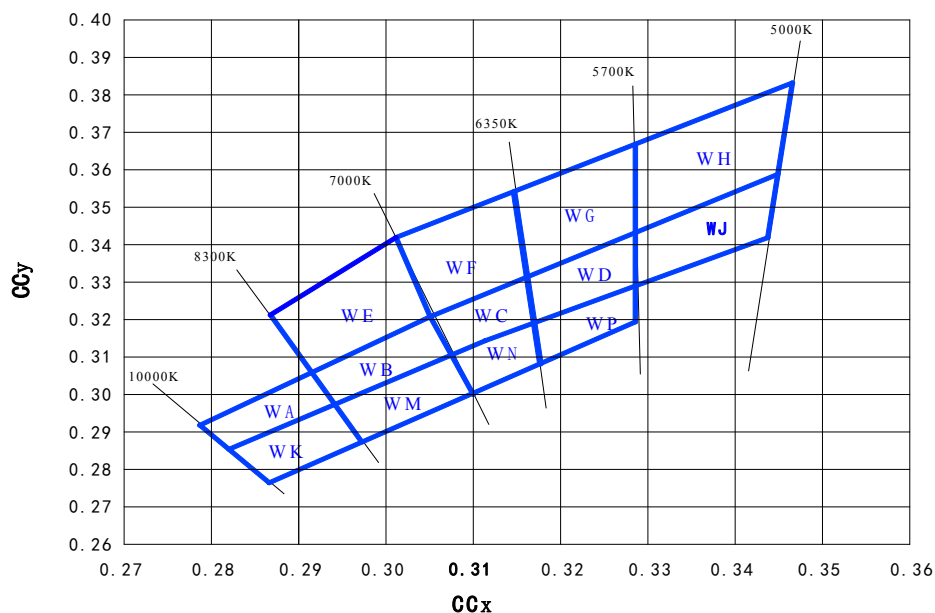
Parameter	Symbol	Ratings	Units
Power Dissipation	P_D	3.312	W
Continuous Forward Current	I_F	360	mA
Peak Forward Current ^[2]	$I_F(\text{Peak})$	360	mA
LED Junction Temperature	T_J	125	$^{\circ}\text{C}$
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-40°C To $+105^{\circ}\text{C}$	
Storage Temperature Range	T_{STG}	-40°C To $+85^{\circ}\text{C}$	
Manual Soldering Temperature	T_{SOL}	$250^{\circ}\text{C} \pm 20^{\circ}\text{C}$ For 3~5 Seconds	
ESD Sensitivity	ESD	1000V HBM	

Notes:

[1]. Tolerance Θ :10%.

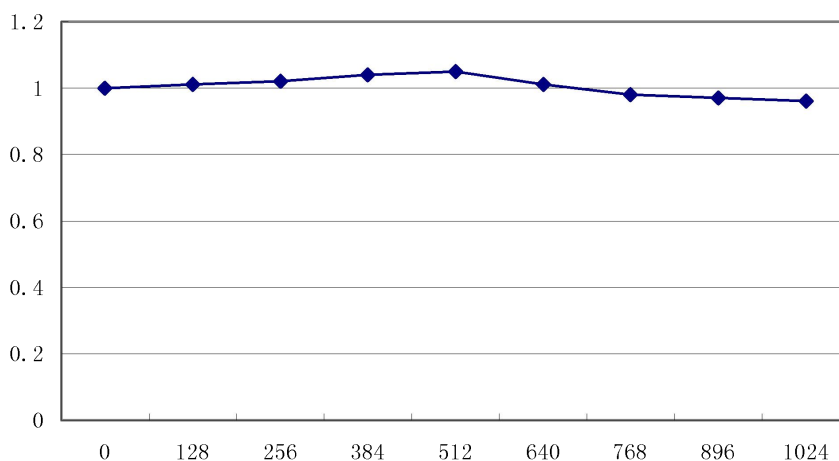
[2]. 1/10 Duty Cycle 0.1ms Pulse Width.

Bin Structure



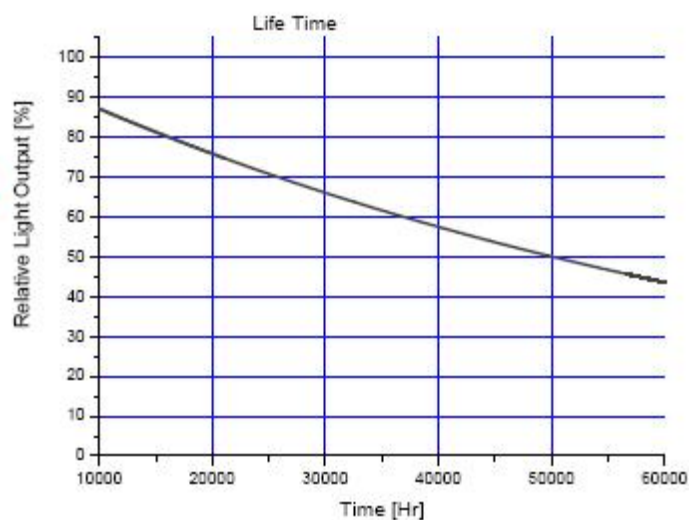
Room Temperature Operating Life Reliability Test Result

($T_a=25^{\circ}\text{C}$, $I_f=300\text{mA}$) Use SSC circuit board&heat sink($T_j=50^{\circ}\text{C}$)



1000HR 3% degradation

Life Time graph (使用寿命)



50000HR 50% degradation