

规格书

SPECIFICATION

文件编号: _____
NO. _____
客户名称: _____
Customer: _____
客户料号: _____
Part.No.: _____
品 名: _____
Description **GT-HP3WRGB-1C3-A5** _____
规 格: _____
Model: _____
送样日期: _____
Day: _____

客户承认章/签 CUSTOMER APPROVED	核准 APPROVED	制定 ISSUED

Greentron Technology(HK)CO.,LTD

Tel:+86-755-23727658 Fax:+86-755-23727659

<http://www.gtsemic.com>

ADD: YangNan Building,272No ChuangYe Second's Road,BaoAn ShenZhen

◆ Features

- * Small package with high efficiency
- * Designed for high current operation
- * Low voltage operation, Instant light, Long operation life
- * Lead free product
- * RoHS compliant

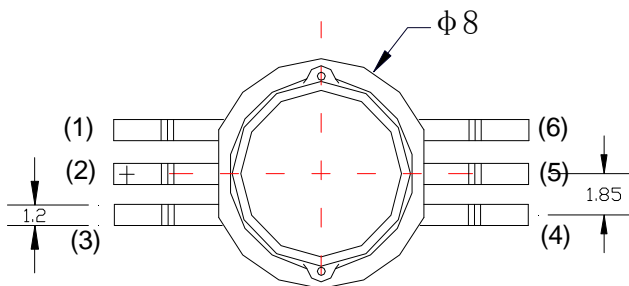


◆ Applications:

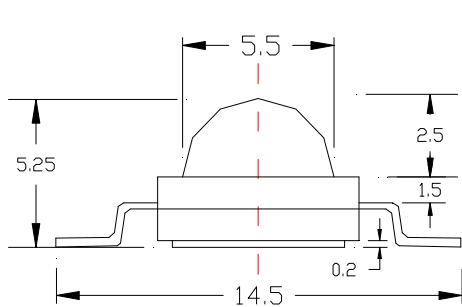
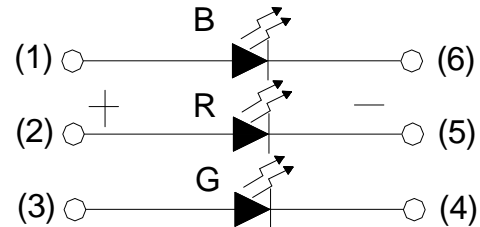
- * Mobile phone flash
- * Automotive interior/Exterior lighting
- * Automotive forward lighting
- * Architectural lighting
- * LCD TV / Monitor backlight

- * Projector light source
- * Traffic signals
- * Task lighting
- * Decorative/ Pathway lighting
- * Remote / Solar powered lighting
- * Household appliances

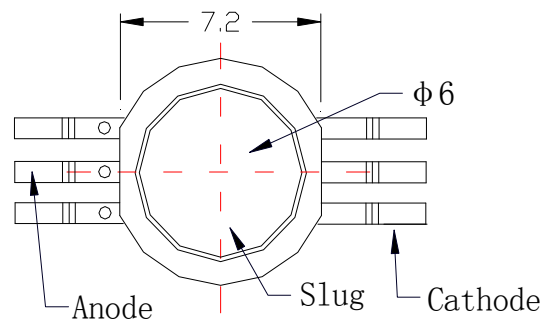
◆ Package Dimensions



Top View



Side View



Bottom View

Notes:

1. All dimensions are in mm,
2. Tolerance is ± 0.3 mm unless otherwise noted.

◆ Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Rating	Unit
Junction temperature (有限最高结温)	T_j	120	$^{\circ}\text{C}$
Operation Temperature Range (工作温度)	T_{opr}	-25to +75	$^{\circ}\text{C}$
Storage Temperature Range (贮藏温度)	T_{stg}	-40 to +80	$^{\circ}\text{C}$
Thermal resistance (有效热阻)	R_{J-B}	8	$^{\circ}\text{C/W}$
ESD Sensitivity (HBM) (抗静电级别)	--	2000	V
Hand Soldering Temperature (手工焊接温度)	$350 \pm 20^{\circ}\text{C}/3 \sim 5\text{sec}$		

NOTE: * Pulse width $\leq 0.1\text{msec}$ Duty Ratio $\leq 1/10$

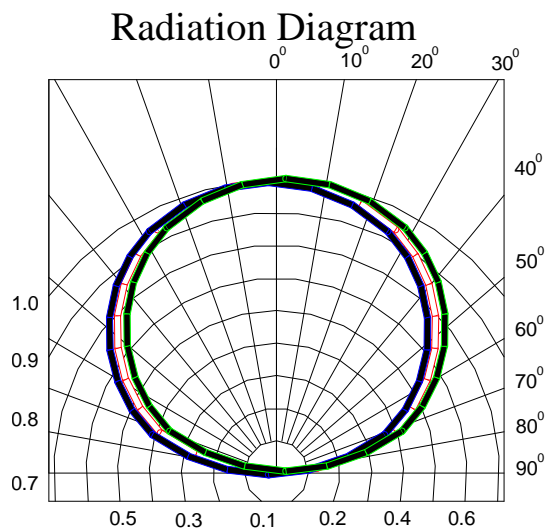
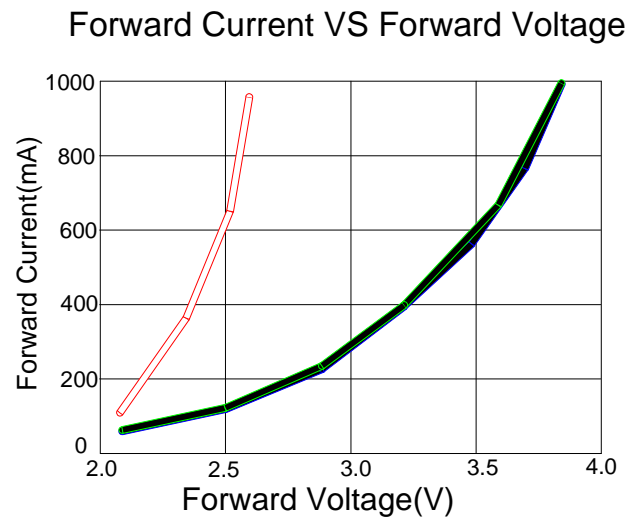
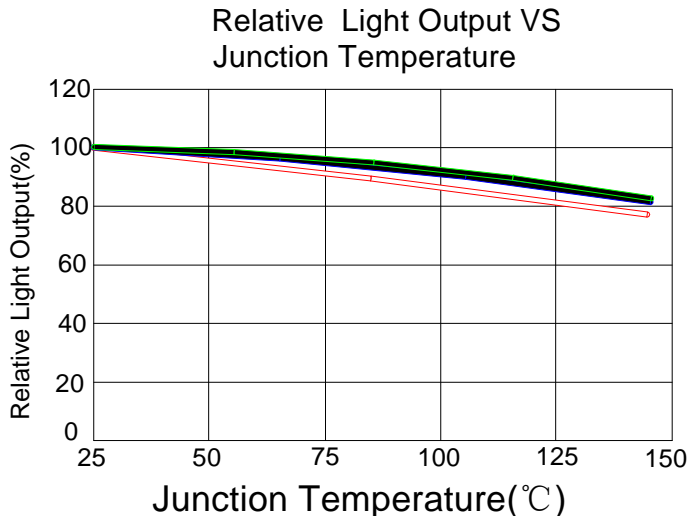
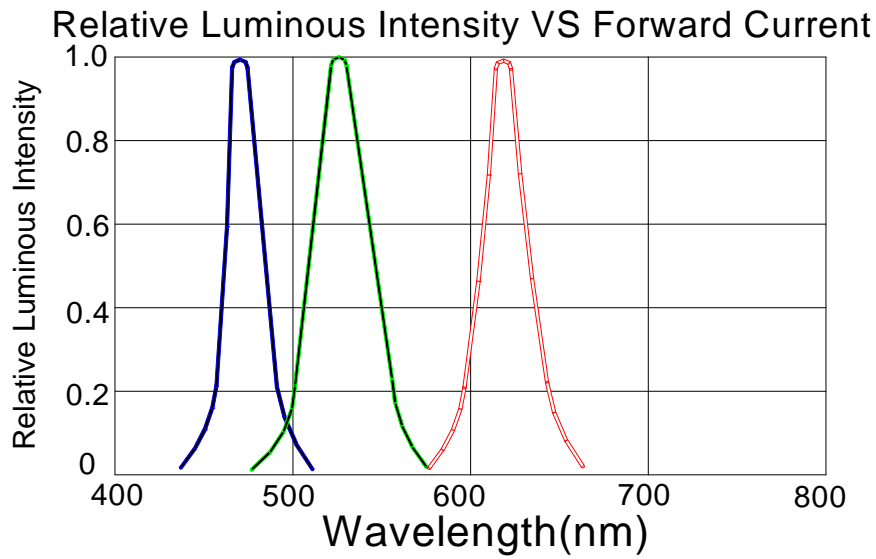
◆ Electrical-Optical Characteristics ($T_A=25^{\circ}\text{C}$)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit	
Forward Voltage (V_F)	$I_F=700\text{mA}$	V_F	R	2.0		2.8	V
			G	3.0		3.8	
			B	3.0		3.8	
View Angle	$I_F=700\text{mA}$	$2\theta_{1/2}$		140		deg	
Chromaticity	$I_F=700\text{mA}$	λ_{dom}	R	620		630	nm
			G	520		530	
			B	460		470	
Reverse Current	$V_R=-5\text{V}$	I_R			5	μA	
Luminous flux	$I_F=700\text{mA}$	Φ_v	R	90		110	lm
			G	200		220	
			B	30		40	

Note:

- | | |
|---|--------------------|
| 1.Tolerance of measurement of luminous flux | $\pm 10\%$ |
| 2.Tolerance of measurement of CCT | $\pm 5\%$ |
| 3.Tolerance of measurement of chromatic coordinates | ± 0.005 |
| 4.Tolerance of measurement of forward voltage | $\pm 0.05\text{V}$ |

◆ Typical Electrical/Optical Characteristic Curves (If=0 0mA; TA=25°C)



Note: —:RED —:GREEN —:BLUE

◆ Reliability

1. Test Items And Results

Item	Standard Test Method	Test conditions	Note	Number of Damaged
Resistance to Soldering Heat	JEITA ED-4701 300 302	T _{SLD} :160°C±5°C 10sec	1 time	0/30
Solder ability	JEITA ED-4701 300 303	TSLD=150±5°C,5Sec	1time	0/30
Thermal Shock	JEITA ED-4701 300 307	-40-100°C 10min, 10min	100cycles	0/30
Temperature Cycle	JEITA ED-4701 100 105	-40°C~25°C~100°C~25°C 30min. 5min. 30min.5min	160cycles	0/30
Terminal Strength (Pull test)	JEITA ED-4701 400 401	Load 10N(1kgf) 10±1sec	None Damage	0/30
Terminal Strength (bending test)	JEITA ED-4701 400 401	Load 5N(0.5kgf) 0° ~90° ~0° bend 2 times	None Damage	0/30
Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60°C,RH=90%	1000hrs	0/30
Steady State Operating life	--	Ta=25°C,IF=700mA	1000hrs	0/30
Steady State Operating life of High Humidity Heat	--	Ta=60°C RH=90%,IF=700mA	1000hrs	0/30
High Temperature Storage	JEITA ED-4701 200 201	Ta=100°C	1000HRS	0/30
Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000HRS	0/30

2. Criteria for Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V _F	I _F =700 mA	---	Initial Data ×1.1
Luminous Intensity	I _V	I _F =700 mA	Initial Data × 0.9	---
Reverse Current	I _R	V _R = 5V	---	≦5μA