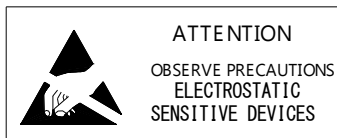


广州市昌辉电子科技有限公司
Guangzhou changhui electronics co.,ltd

承认书
SPECIFICATIONS FOR SURFACE MOUNT LED
LED产品规格书



Customer
客户名称 : _____
Product Discription
产品描述 : PD TOP LED
Model
型号 : CH-PD552C-P22-L39-M110
Issue Date
发出日期 : 2023-06-30

Prepared By 制定	Checked By 审核	Approved By 批准	Marketing Dept. 市场部

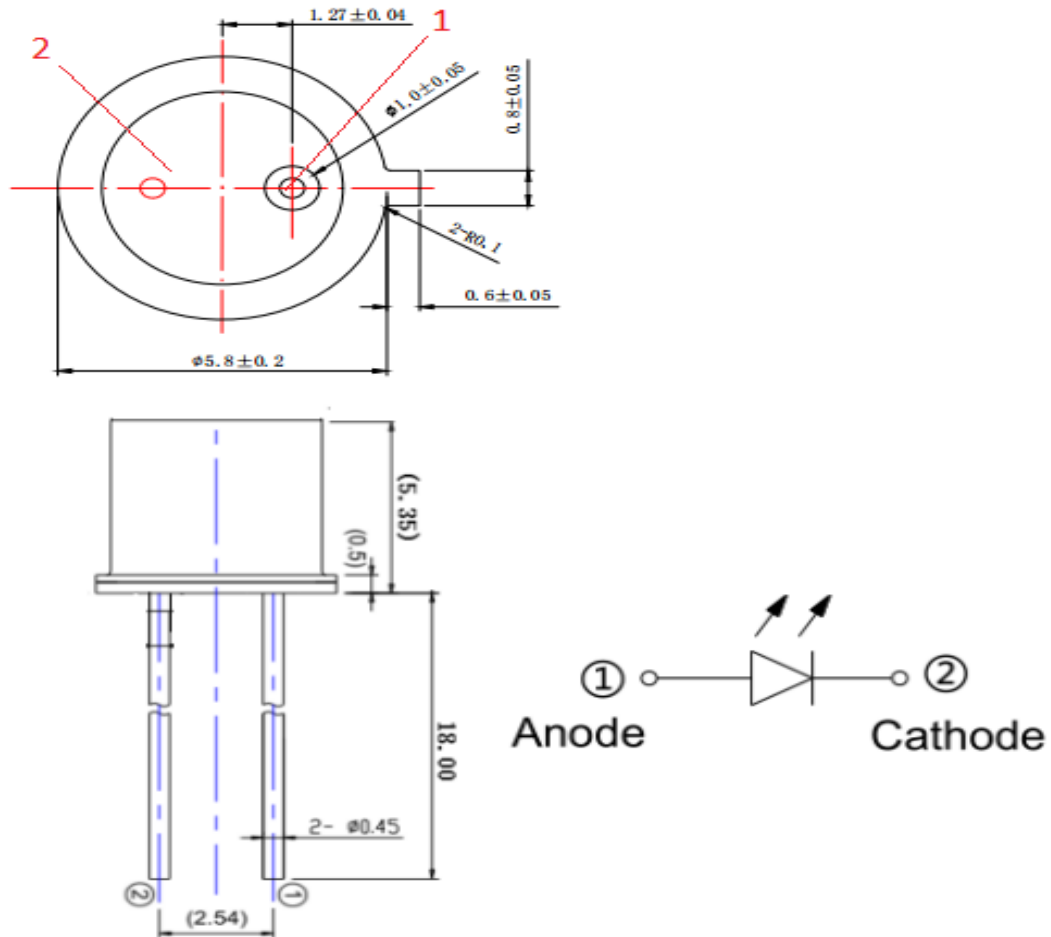
APPROVED SIGNATURES 客户确认		
Purchase Dept. 采购部	Quality Dept. 品质部	Engineering Dept. 技术部

广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋
联系电话: 13822241158
网址: www.changhui-led.com

广州市昌辉电子科技有限公司
Guangzhou changhui electronics co.,ltd

Part Number: CH-PD552C-F22-L39-M110

Rev:00



Notes: 1.All dimensions are in millimeters
2.Tolerances unless dimensions ± 0.25 mm

广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋
联系电话: 13822241158
网址: www.changhui-led.com

广州市昌辉电子科技有限公司
Guangzhou changhui electronics co.,ltd

Part Number: CH-PD552C-F22-L39-M110

Rev:00

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Reverse Voltage	V R	30	V
Operating Temperature	Topr	-20 ~ +80℃	℃
Storage Temperature	Tstg	-20 ~ +80℃	℃
Lead Soldering Temperature	Tsol	260	℃
Power Dissipation at(or below) 25℃Free Air Temperature	Pc	150	mW

Notes: *1:Soldering time $\leq$ 5 seconds.

广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋
联系电话: 13822241158
网址: www.changhui-led.com

广州市昌辉电子科技有限公司
Guangzhou changhui electronics co.,ltd

Part Number: CH-PD552C-F22-L39-M110

Rev:00

Electro-Optical Characteristics (Ta=25°C)

TS-TOPD552C-P22-L39-M110

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Rang Of Spectral Bandwidth	λ 0.5	$I_C=100 \mu A$ $E_e=0mW/cm^2$	700	---	1100	nm
Wavelength Of Peak Sensitivity	λ_p	---	---	940	---	nm
Open-Circuit Voltage	V OC	$E_e=5mW/cm^2$ $\lambda_p=940nm$	---	0.32	---	V
Rise Time	t_r	V R =10V R L =1000 Ω	---	10	---	μS
Fall Time	t_f		---	10	---	
Short- Circuit Current	I SC	$E_e=1mW/cm^2$ $\lambda_p=940nm$	---	15	---	UA
Reverse Light Current	I L	$E_e=1mW/cm^2$ $\lambda_p=940nm$ V R =5V	5	30		UA
Reverse Dark Current	I D	$E_e=0mW/cm^2$ V R =10V	5	15		na
Reverse Breakdown Voltage	B VR	$E_e=0mW/cm^2$ I R =100 μA	30	170	---	v
Total Capacitance	Ct	$E_e=0mW/cm^2$ V R =5V f=1MHz	---	10	---	Pf

广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋
联系电话: 13822241158
网址: www.changhui-led.com

广州市昌辉电子科技有限公司

Guangzhou changhui electronics co.,ltd

Part Number: CH-IR502C-F9-L39-M106

Rev:00

Typical Electro-Optical Characteristics Curves

Fig.1 Collector Power Dissipation vs.
Ambient Temperature

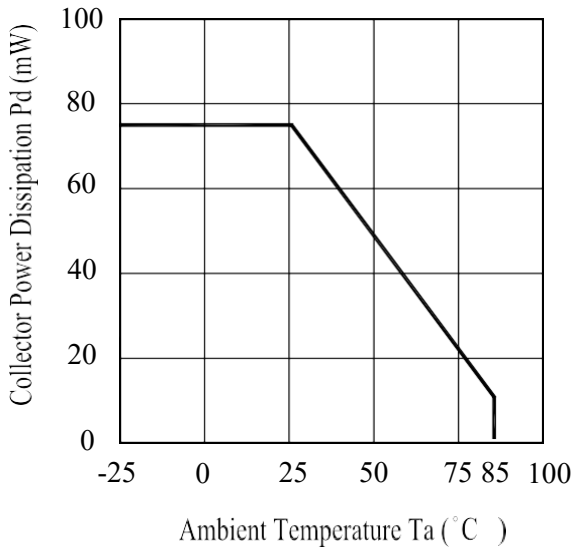


Fig.2 Spectral Sensitivity
 $T_a=25^\circ\text{C}$

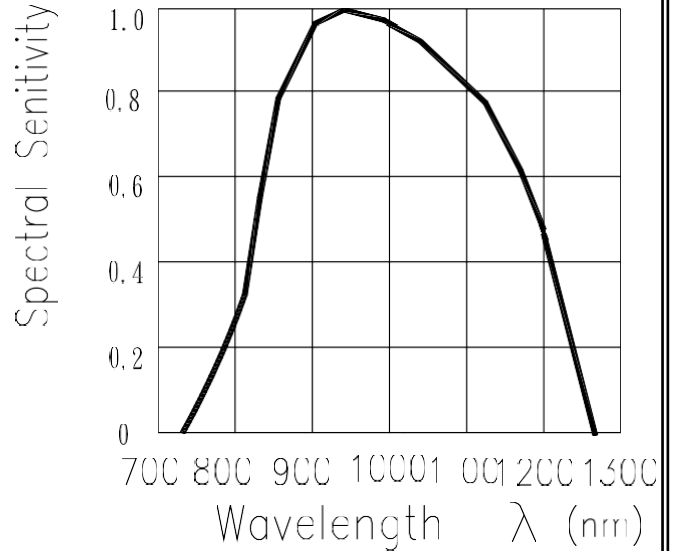


Fig.3 Relative Collector Current vs.
Ambient Temperature

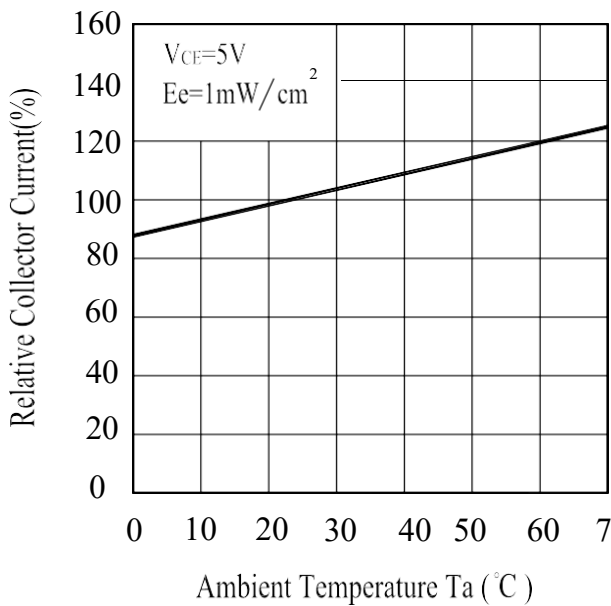
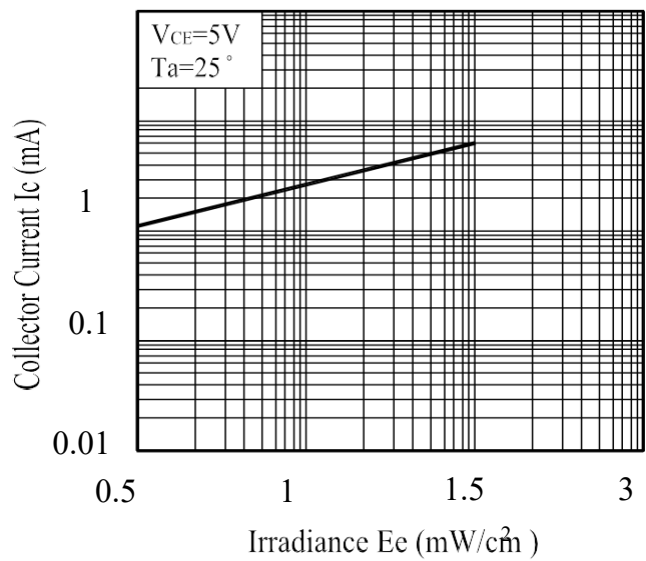


Fig.4 Collector Current vs.
Irradiance
100



广州市昌辉电子科技有限公司

Guangzhou changhui electronics co.,ltd

Part Number: CH-IR502C-F9-L39-M106

Rev:00

Fig.5 Collector Dark Current vs.
Ambient Temperature

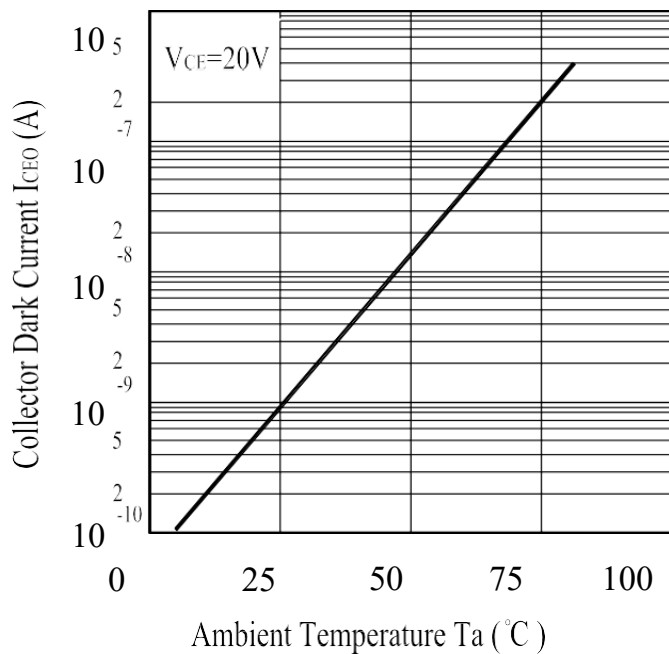
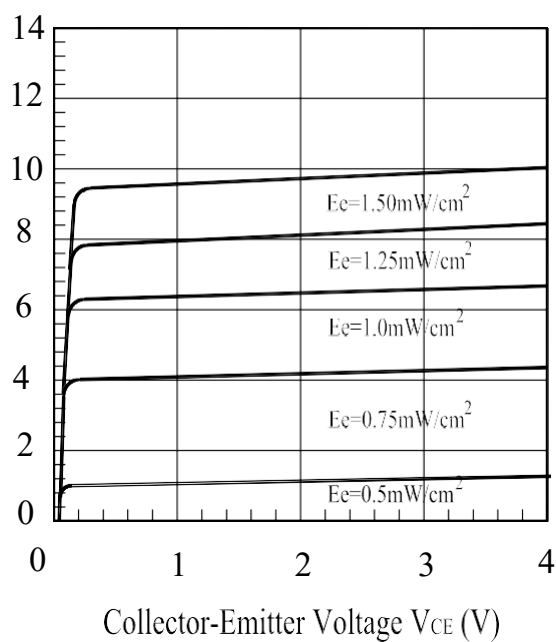


Fig.6 Collector Current vs.
Collector-Emitter Voltage



广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋

联系电话: 13822241158

网址: www.changhui-led.com

广州市昌辉电子科技有限公司

Guangzhou changhui electronics co.,ltd

Part Number: CH-IR502C-F9-L39-M106

Rev:00

Reliability Test Item And Condition

The reliability of products shall be satisfied with items listed below.

Confidence level : 90%

LTPD : 10%

NO.	Item	Test Conditions	Test Hours/ Cycles	Sample Sizes	Failure Judgement Criteria	Ac/Re
1	Solder Heat	TEMP. : 260°C±5°C	10secs	22pcs	$I_{C(ON)} \leq L \times 0.8$ L : the initial test value	0/1
2	Temperature Cycle	H : +100°C 15mins $\updownarrow$ 5mins L : -40°C 15mins	300Cycles	22pcs		0/1
3	Thermal Shock	H : +100°C 5mins 10secs L : -10°C 5mins	300Cycles	22pcs		0/1
4	High Temperature Storage	TEMP. : +100°C	1000hrs	22pcs		0/1
5	Low Temperature Storage	TEMP. : -40°C	1000hrs	22pcs		0/1
6	DC Operating Life	V _{CE} =5V	1000hrs	22pcs		0/1
7	High Temperature/ High Humidity	85°C / 85% R.H	1000hrs	22pcs		0/1

广东省广州市南沙区环市大道中成汇街2号南沙城商务A栋

联系电话: 13822241158

网址: www.changhui-led.com