
SPECIFICATION FOR APPROVAL

承 认 书

CUSTOMER'S CODE

客户代码: _____

DESCRIPTION

品 名: _____ 发光二极管

SPECIFICATION

规 格: _____ $\Phi 5$ 四脚三色共阴

PART NO.

本厂型号: _____ 503RGBC -共阴

REFERENCE No.

档案号: _____

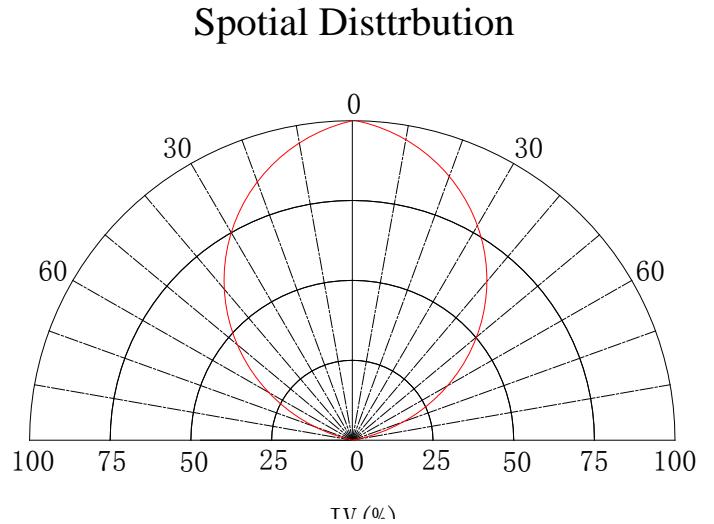
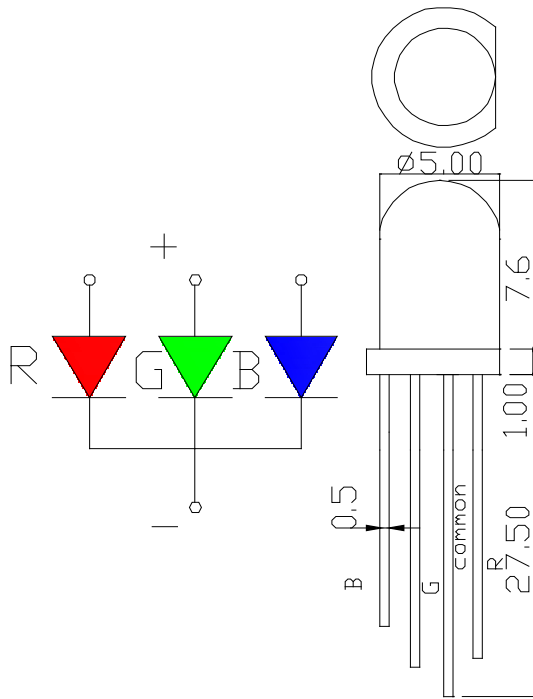
NUMBER OF SAMPLE

送样数量 _____

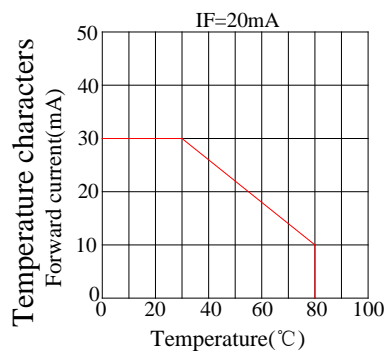
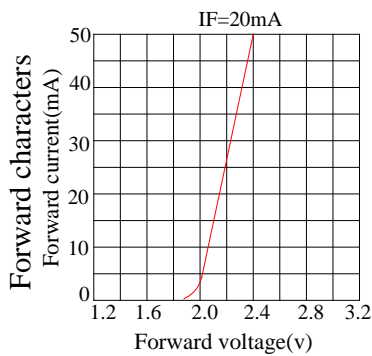
COPY OF ACKNOWLEDGEMENT

承认书份数 _____

Approved By Customer 客 户 承 认	Qualified By 核 准	Form Designer 制 作

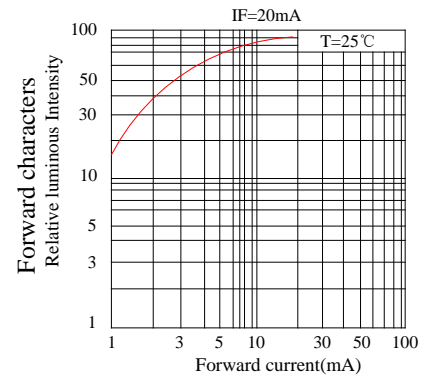
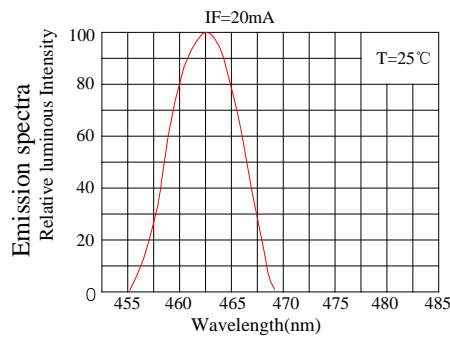
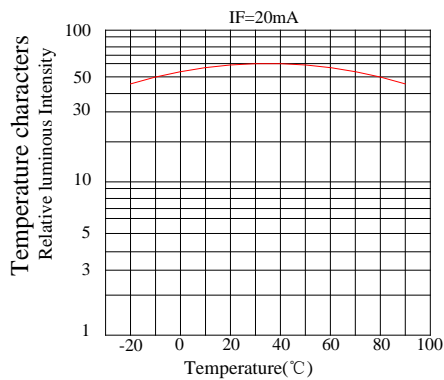


Typical electrical-optical Characteristics curves



Notes:

The data are an typical presentation of the product, Contact customer service for details of technical information and warranty.
The product is sensitive to static antistatic operation environment is recommended
Products are shipped in either bulk bag package or taping.



■ Absolute Maximum Rating 极限工作参数

Item 项目	Symbol 代号	Absolute Maximum Rating 极限工作参数	Unit 单位

Forward Current	正向电流	IF	20	mA
Peak Forward Current	瞬间脉冲电流	IFP	50	mA
Reverse Voltage	反向电压	VR	5	V
Power Dissipation	消耗功率	PD	100	mw
Electrostatic discharge	静电释放	ESD	1000	V
Operation Temperature	工作温度范围	TOPR	-25~+80	°C
Storage Temperature	存放温度范围	TSTG	-40~+80	°C
Lead Soldering Temperature	最高焊接温度	TSOL	330 °C for 3sec Max。	

*Ifp Conditions: Pulse Wide ≤ 10msec ≤ 1/10 瞬间脉冲电流

*Tsol Conditions: 3mm from the base of epoxy bulb 最高焊接温度 距胶体 3mm

■ Typical Optical/Electrical Characteristics 光电特性参数

Item 项目	Symbol 代号	Condition 件	测试条	Min 最小值	Typ 典型值	Max 最大值	Unit 单位
Forward Voltage 正向电压	VF	IF=20mA	R	1.8	2.0	2.2	V
			G	3.0	3.2	3.4	
			B	2.9	3.1	3.3	
Light intensity 光强度	IV	IF=20mA	R	1000	2000	2200	mcd
			G	2000	2500	3000	
			B	900	1000	1200	
Wavelength 波长	WD	IF=20mA	R	620	623	625	nm
			G	515	517	520	
			B	455	460	465	
Reverse current 逆向电流	IR	IF=20mA		0	/	5	uA
Viewing Angle 半光全角	2θ 1/2	IF=20mA				20	deg
Recommend Forward Current 持续正向电流	IF(rec)	IF=20mA				20	mA

Notes:

1. Work absolute ratings Ta=25°C 工作常规值 温度=25°C

2. Tolerance of measurement of forward voltage ±0.1V 正向电压误差范围 ± 0.1V

LED LAMP RELIABILITY

● Test Items And Results

Type	Test Item	REF. Standard	Test Condition	Note	Number of Damaged
Environmental Sequence	Temperature Cycle	JIS C 7021 (1997) A-4	-20°C → 25°C → 80°C → 25°C 30mins,5mins,30mins,5mins	100 cycles	0/100
	High Humidity Heat Cycle	JIS C 7021 (1997) A-5	30°C → 65°C 90%RH 24hrs/1cycle	10 cycles	0/100
	High Temperature Storage	JIS C 7021 (1997) B-10	Ta=80°C	1000hrs	0/100
	Humidity Heat Storage	JIS C 7021 (1997) B-11	Ta=60°C RH=90%	1000hrs	0/100
	Low Temperature Storage	JIS C 7021 (1997) B-12	Ta= -30°C	1000hrs	0/100
Operation Sequence	Life Test	JIS C 7035 (1985)	Ta=25°C I _F =20mA	1000hrs	0/100
	High Humidity Heat Life Test	*	60°C RH=90% I _F =20mA	500hrs	0/100
	Low Temperature Life Test	*	Ta= -20°C I _F =20mA	1000hrs	0/100
Destructive Sequence	Resistance to Soldering Heat	JIS C 7021 (1997) A-11	Tsol=260 ± 5°C,10sec (3mm from the base of the epoxy bulb)	1 time	0/20
	Solderability	JIS C 7021 (1997) A-2	Tsol=235 ± 5°C,5sec (Using flux)	1 time (over 95%)	0/20
	Lead Pull/Bend Test	JIS C 7021 (1997)A-11	Load 2.5N (0.25kgf) 0° → 90° → 0° Bending 3 times	No noticeable damage	0/20

* Refer to reliability test standard specification for in this line.

● Criteria for Judging The Damage

Item	Symbol	Test Condition	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V _F	I _F = 20mA	---	Initial data x 1.1
Reverse Current	I _R	V _R = 5V	---	Initial data x 2.0
Luminous Intensity	I _v	I _F = 20mA	Initial data x 0.7	---