SPECIFICATION FOR APPROVAL

承　认　书

CUSTOMER'S CODE
客户代码: _____

DESCRIPTION
品　　名: 发光二极管

SPECIFICATION
规　　格: Φ5 透明四脚三色共阴

DATE
送样日期: _____

PART NO.
本厂型号: RGB-共阴

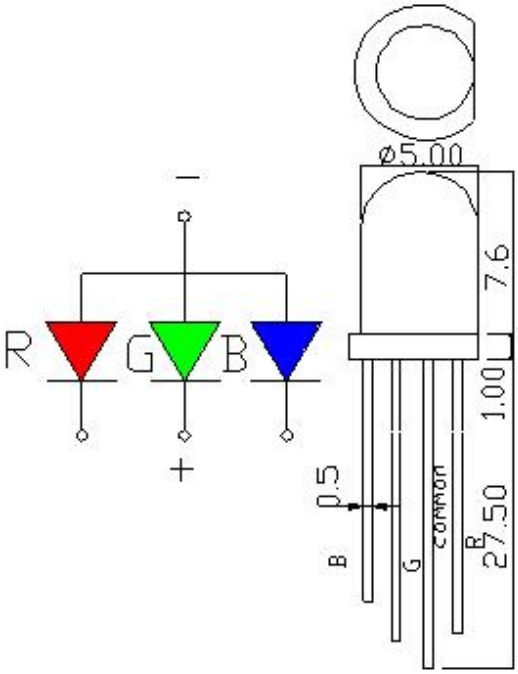
REFERENCE No.
档 案 号: _____

NUMBER OF SAMPLE
送样数量 _____

COPY OF ACKNOWLEDGEMENT
承认书份数 _____

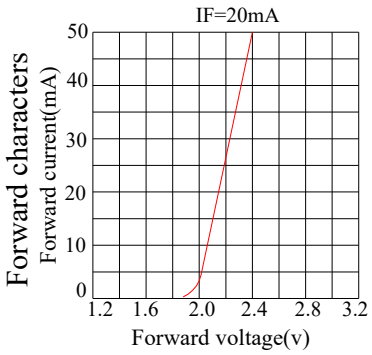
Approved By Customer 客 户 承 认	Qualified By 核　　准	Form Designer 制　　作

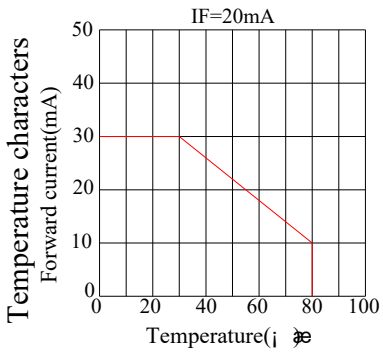
Emitter 外型图：





Typical electrical-optical Characteristics curvers



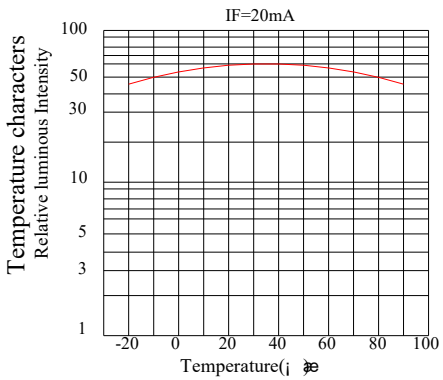


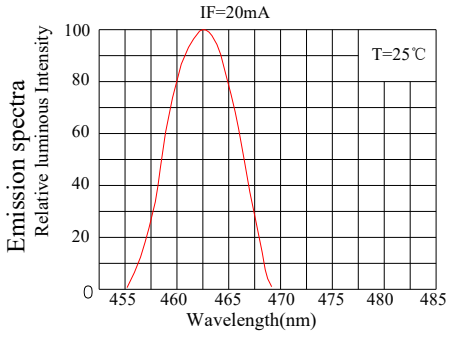
Notes：

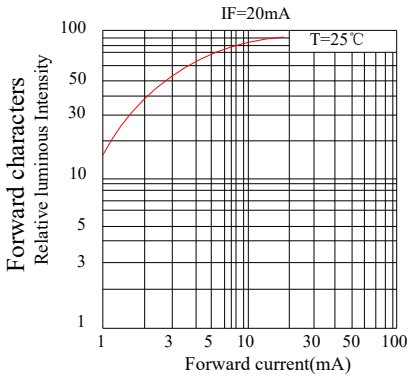
The data are an typical presenlation of the product,Contact customer service for details of technical information and warranty.

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
ReverseVoltage 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	℃
Storage Temperature 存放温度范围	TSTG	-40～+80	℃
Lead Soldering Temperature 最高焊接温度	TSOL	240 ℃ 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 测试条件		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	1.9	2.0	2.1	V
			G	3.1	3.2	3.3	
			B	3.0	3.1	3.2	
Light intensity 光强度	IV	IF=20mA	R	6000		8000	mcd
			G	8000		10000	
			B	5000		6000	
Wavelength 波长	WD	IF=20mA	R	620		625	nm
			G	520		525	
			B	465		470	
Reverse current 逆向电流	IR	IF=20mA		0	/	5	uA

Viewing Angle 半光全角	2θ1/2	IF=20mA	35		40	deg
Recommend Forward Current 持续正向电流	IF(rec)	IF=20mA			20	mA

Notes:

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

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

LED LAMP RELIABLITY

● 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℃→25℃→80℃→25℃ 30mins,5mins,30mins,5mins	100 cycles	0/100
	High Humidity Heat Cycle	JIS C 7021 (1997) A-5	30℃→65℃ 90%RH 24hrs/1cycle	10 cycles	0/100
	High Temperature Storage	JIS C 7021 (1997) B-10	Ta=80¡ æ	1000hrs	0/100
	Humidity Heat Storage	JIS C 7021 (1997) B-11	Ta=60¡ æ RH=90%	1000hrs	0/100
	Low Temperature Storage	JIS C 7021 (1997) B-12	Ta= -30¡ æ	1000hrs	0/100
Operation Sequence	Life Test	JIS C 7035 (1985)	Ta=25¡ æ I_F=20mA	1000hrs	0/100
	High Humidity Heat Life Test	*	60℃ RH=90% I_F=20mA	500hrs	0/100
	Low Temperature Life Test	*	Ta= -20℃ I_F=20mA	1000hrs	0/100
Destructive Sequence	Resistance to Soldering Heat	JIS C 7021 (1997) A-11	Tsol=260 ¡ Æ¡ æ10sec (3mm from the base of the epoxy bulb)	1 time	0/20
	Solderability	JIS C 7021 (1997) A-2	Tsol=235 ¡ Æ¡ æ5sec (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	Iv	I_F = 20mA	Initial data x 0.7	---