



深圳市宇亮光电技术有限公司
Shenzhen yuliang optoelectronic technology co.,ltd

SAMPLE APPROVAL SHEET

样品规格承认书

Customer Name

(客户名称) _____

Jia Jin Part Number

(宇亮产品型号) 5MM 食人鱼红光

Sample Quantity

(样品数量) _____

Sample Date

(送样日期) _____

APPROVED STGNATURES

(客户确认)

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审核: _____ 制作: 赵松林

www.yllled.com

地址: 深圳市观澜镇章阁村桂月路深圳市低碳科技示范园 A1 栋

TEL:0755-29061311(总机) FAX: 0755-29089931



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Part No:

5MM 食人鱼红光

Features:

- * High intensity Polygonal LED lamp
- * $\Phi 5\text{MM}$ round shape
- * UV resistant epoxy

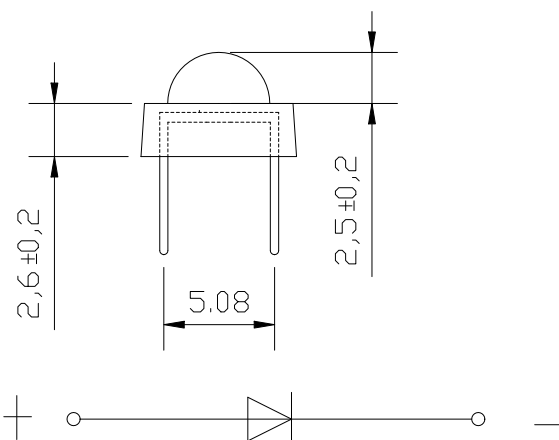
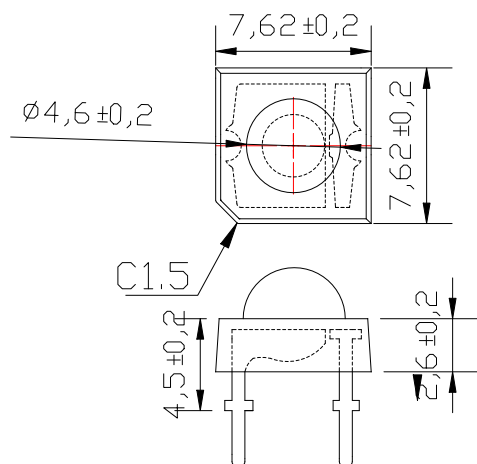
Applications:

- * LED Lighting
- * Automotive Lighting application

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Max	Unit
Power Dissipation	PD	100	mW
Peak Forward Current	I_{FF}	60	mA
Continuous Forward Current	I_F	20	mA
Reverse Voltage	Vs	5	V
Operating Temperature Range	Topr	-30°C to +80°C	
Storage Temperature Range	Tstg	-40°C to +100°C	
Lead Soldering Temperatur Δ	Tsol	260	°C

Package Dimensions



Unit : mm

Tolerance are ± 0.2 , unless note otherwise

* Duty ratio max 1/10 Pulse Width max. 0.1ms;

Δ At the position of 4mm from the bottom of the package within 5 seconds.

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Electrical Optical Characteristics

(Ta=25℃, @IF=20mA)

Part No.	Material	Emitting color	Forward voltage(V)		Luminous Intensity(mcd)		Dominant Wavelength(nm)		Viewing Angle (2θ 1/2)
			Min	Max	Min	Max	Min	Max	
5MM 食人鱼红光	AlGaInP	Red	1.8	2.2	1300	1600	620	630	90±5

BIN Table: (Test at 20 mA)

VF (v)	
Code	Range
1	1.8-2.0
2	2.0-2.2

IV (mcd)	
Code	Range
1	1300-1600

Wd (nm)	
Code	Range
R1	620-625
R2	625-630

- Luminous Intensity Measure tolerance are

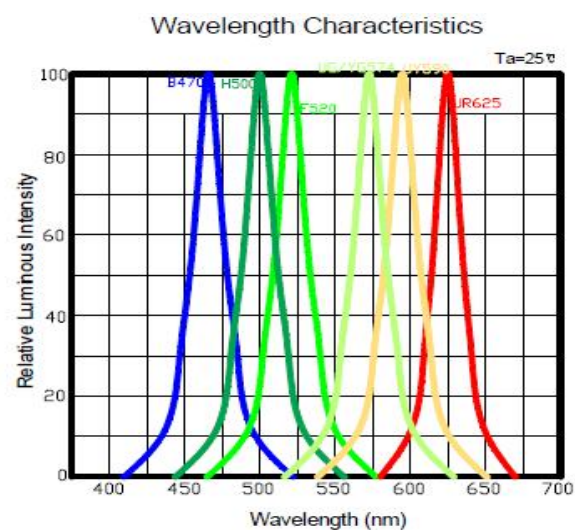
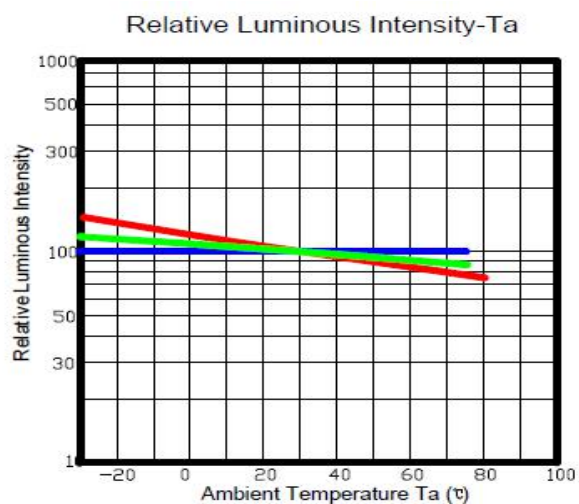
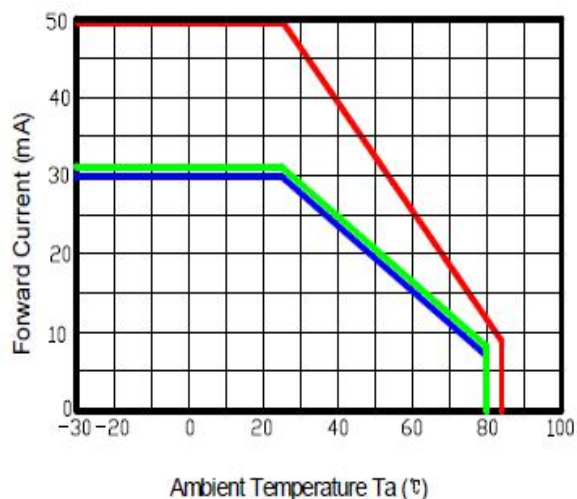
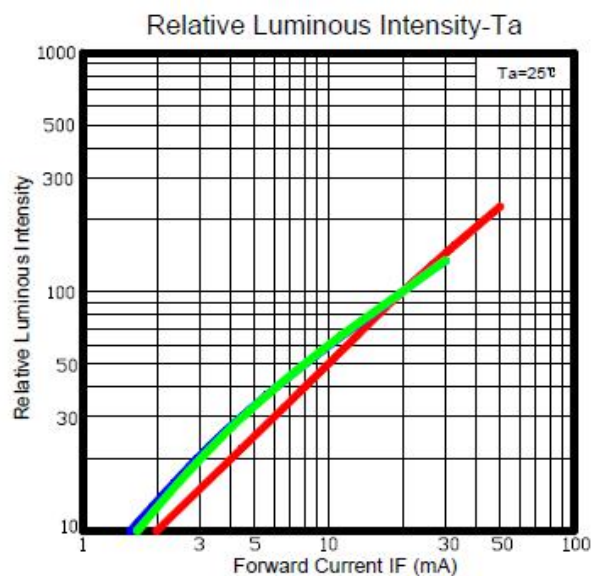
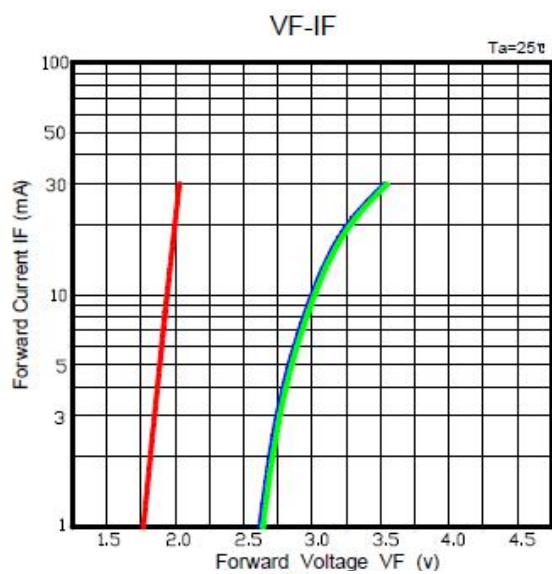
Caution in ESD :

1. Static Electricity and surge damages the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs. All devices、Equipment and machinery must be properly grounded.
2. When inspecting own final products on which LEDs were mounted, It is easy to find static-damaged LEDs by light emission test at lower current (below 1mA is recommended) .
3. Damaged LEDs will show some unusual characteristics such as leak current remarkably increases, starting forward voltage becomes lower, or the LEDs get unlighted at the low current.

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Reliability Test

Classification	Test Item	Test Conditions	Sample Size	Num of Damaged	Reference Standard
Endurance Test	Operating Life	$I_F=30\text{mA}$ 1000Hrs	22	0	MIL-STD-750:1026 MIL-STD-202:107D JIS C 7021:B-4
	High Temp. High Humidity Storage	$85\pm5^\circ\text{C}$ 85-90% RH 1000Hrs	100	0	MIL-STD-202:103D JIS C 7021:B-11
	Hi-Temp. Storage	$100\pm5^\circ\text{C}$ 1000Hrs	100	0	MIL-STD-750:2031 MIL-STD-202:210A JIS C 7021:B-10
	Low-Temp. Storage	$-55\pm5^\circ\text{C}$ 1000Hrs	100	0	JIS C 7021:B-12
Environmental Test	Temperature Cycling	$-40\pm5^\circ\text{C}$ 30min Room Temp. 5min $100\pm5^\circ\text{C}$ 30min 100 Cycles	100	0	MIL-STD-750:1051 MIL-STD-202:107D JIS C 7021:A-4
	Thermal Shock	$-30\pm5^\circ\text{C}$ 5min $100\pm5^\circ\text{C}$ 5min 100 Cycles	100	0	MIL-STD-750:1051 MIL-STD-202:107D JIS C 7021:A3
	Solderability	$230\pm5^\circ\text{C}$ Dwell Time $\leq 5\text{sec}$	22	0	MIL-STD-202:208D MIL-STD-750:2026 MIL-STD-883:2003 JIS C 7021:A-2
	Solder Resistance	$260\pm5^\circ\text{C}$ $10\pm 1\text{sec}$	22	0	MIL-STD-750:2031 MIL-STD-202:210A JIS C 7021:A-1

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min	Max
Forward Voltage	I_F	$I_F=20\text{mA}$	-	U. S. L*1.1
Reverse Current	I_R	$V_R=5\text{V}$	-	U. S. L*2.0
Luminous Intensity	I_v	$I_F=20\text{mA}$	L. S. L*0.7	-

PS: U. S. L. :Upper Standard Level L. S. L. :Lower Standard Level

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