



长方LED照明  
CHANGFANG

## 产品规格书

客户名称: \_\_\_\_\_  
客户品号: \_\_\_\_\_  
公司品号: PD5736NWNB-PCT  
送样日期: 2015.9.06

客户审核		长方审核		
核准人	确认人	核准人	确认人	制作人
				彭晓军
<input type="checkbox"/> 接受 <input type="checkbox"/> 不接受				



长方LED照明  
CHANGFANG

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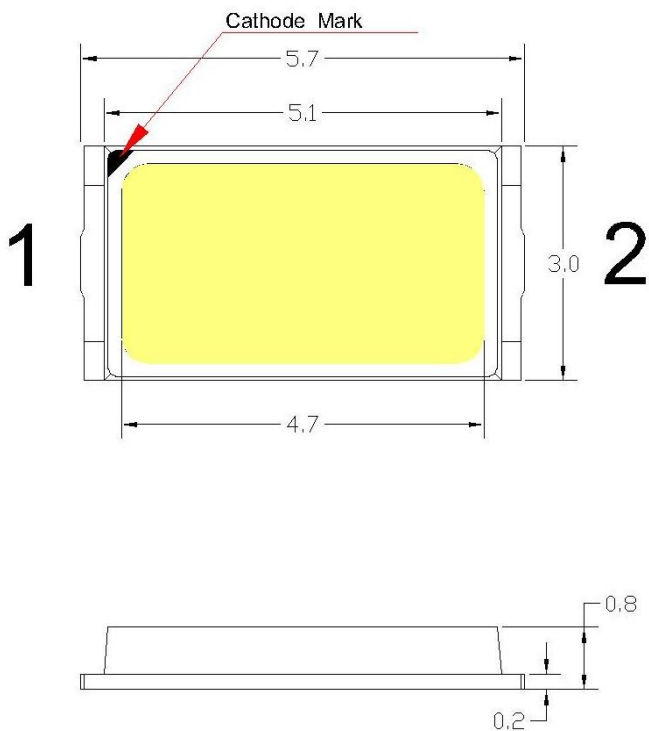
◆ Features

- ◆ Outline dimension :5.6mm\*3.0mm\*0.8mm
- ◆ SMD Top View LED (White Color)
- ◆ RoHS compliant lead-free soldering compatible
- ◆ Soldering methods :SMT assembly available
- ◆ RoHS compliant
- ◆ Package:15000pcs/reel

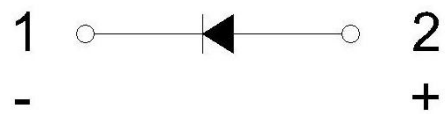
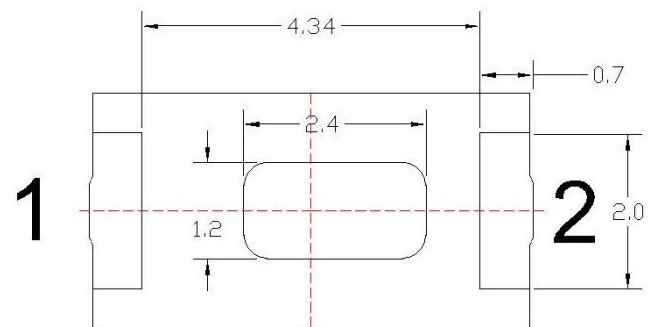
◆ Application

- ◆ Tubular Light application
- ◆ General use

◆ Outline Dimension



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
SENSITIVE DEVICES



1:CATHODE  
2:ANODE

Notes:

[1] : All dimensions are in millimeters (inches);

[2]: Tolerances are  $\pm 0.3\text{mm}$  (0.012inch) unless otherwise noted.

**◆ Absolute maximum ratings @  $I_F=150\text{mA}, T_a=25^\circ\text{C}$** 

Item	Symbol	Absolute Maximum Rating	unit
Forward Current	$I_F$	150	mA
Pulse Forward Current	$I_{FP}$	180	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	500	MW
Operating Temperature	$T_{opr}$	-30~+85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-30~+100	$^\circ\text{C}$
Junction Temperature	$T_j$	110	$^\circ\text{C}$
Electrostatic Discharge	ESD	2000(HBM)	V

**◆ Electrical-Optical characteristics @  $T_a=25^\circ\text{C}$** 

Item	Symbol	Test Condition	Min	Typ	Max	Unit
Forward voltage <sup>[1]</sup>	VF	$I_F=150\text{mA}$	3.0	-	3.6	V
Luminous Flux	$\Phi_v$	$I_F=150\text{mA}$	60	-	70	LM
View Angle	$2\theta_{1/2}$	$I_F=150\text{mA}$	-	120	-	deg
Reverse Current	IR	$V_R=5\text{V}$	-	-	10	$\mu\text{A}$
Color Rendering Index	CCT	$I_F=150\text{mA}$	5000	-	8000	K
Color Rendering Index	CRI	$I_F=150\text{mA}$	-	70	-	Ra
CIE Chromaticity	X	$I_F=150\text{mA}$	详见分光标准			
	Y					

Notes:

[1] Forward voltage(VF)  $\pm 0.1\text{V}$ ;

[2] Luminous Flux( $\Phi_v$ )  $\pm 10\%$ ;

[3] Luminous Intensity(CCT)  $\pm 10\%$ , (X, Y  $\pm 0.01$ );

[4] Color Rendering Index (CRI)  $\pm 3$ ;

[5] View Angle ( $2\theta_{1/2}$ )  $\pm 5$ ;

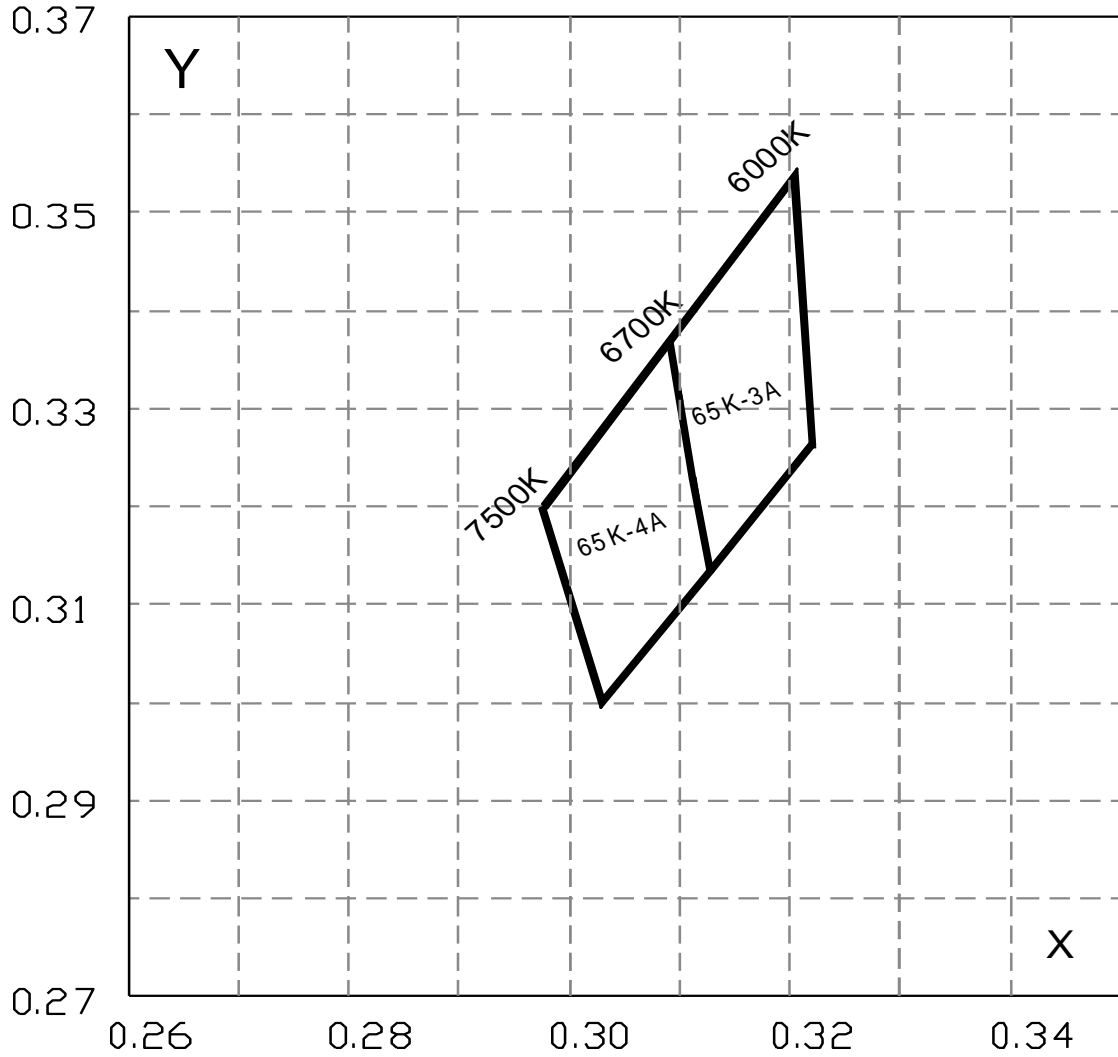
**◆ Luminous Intensity Rank  $\varphi_v$  @IF=150mA, Ta=25°C (Unit:lm)**

BIN	Min	Max	BIN	Min	Max
A	55	60	C	65	70
B	60	65			

**◆ Forward Voltage Rank  $V_F$  @IF=150mA, Ta=25°C (Unit:V)**

Bin	Min	Max	Bin	Min	Max
V1	2.7	3.0	V4	3.3	3.6
V2	3.0	3.3			

◆ Color Rank @IF=150mA ,Ta=25°C (Unit:X/Y)



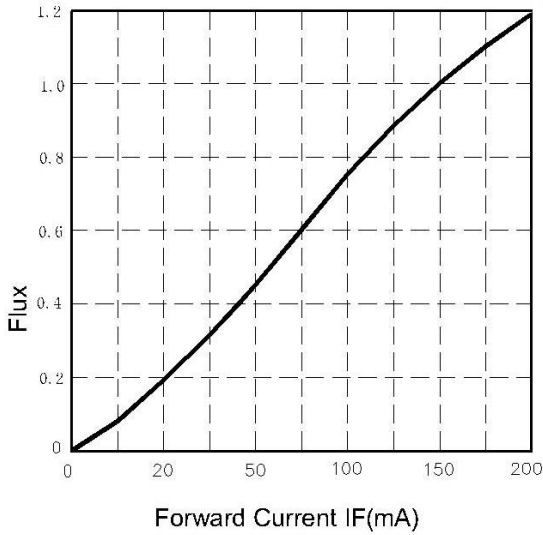
色区名	坐标					相对色温
	X	Y	X	Y	X	
65K-3A	X	0.3091	0.3205	0.3221	0.3127	/
	Y	0.3368	0.3537	0.3264	0.3134	
65K- 4A	X	0.2976	0.3091	0.3127	0.303	/
	Y	0.3199	0.3368	0.3134	0.30	

Notes:

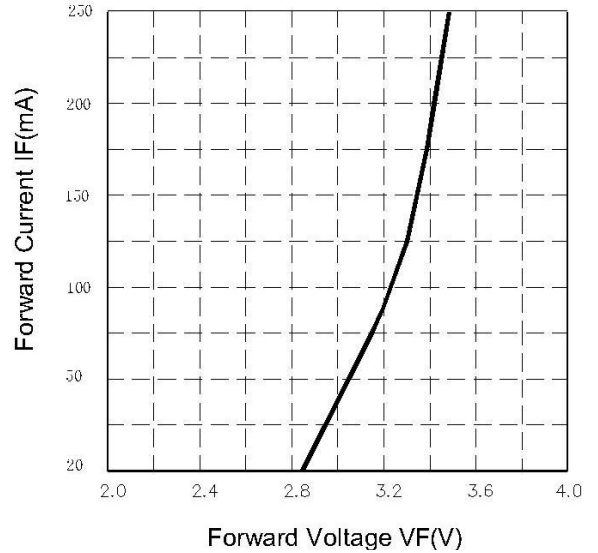
[1] Color Coordinates Measurement allowance is  $\pm 0.01$ ;

◆ Typical Electro-optical Characteristics Curves @Ta=25°C

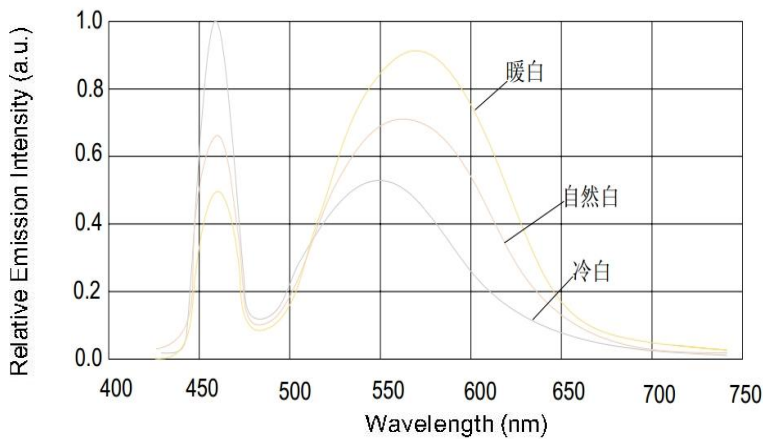
Flux vs. Forward Current



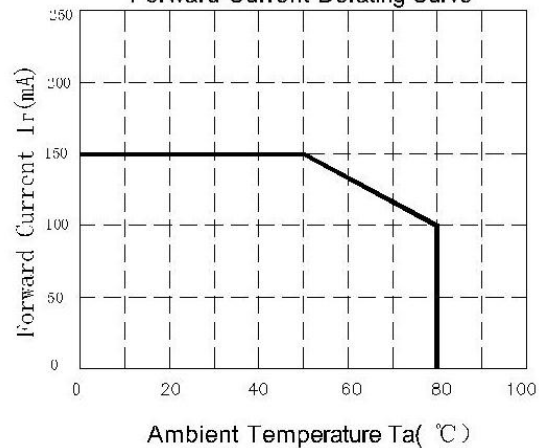
Forward Voltage VS Forward Current



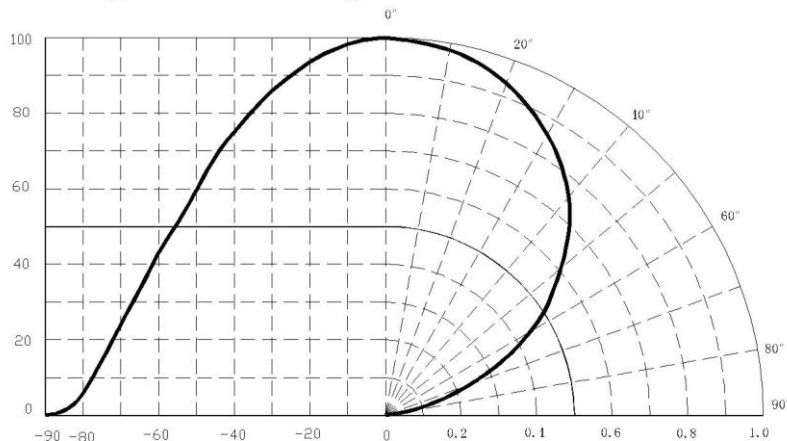
Relative Emission Intensity VS Wavelength



Forward Current Derating Curve



Typical Lambertian Type Radiation Pattern



## ◆Reliability

### ◆TEST ITEMS AND RESULTS

Test Item	Rdf.Standard	Test Conditions	Note	Number of Damaged
High Temperature storage	JESD22-A103	Temp:100°C ±5°C	1000 hrs	0/22
Low Temperatue Storage	JESD22-A119	Temp:-40°C ±5°C	1000 hrs	0/22
Temperature Cycle	JESD22-A104	100°C ±5°C 30min ↓ ↑ 5min -40°C ±5°C 30min	100 cycle	0/22
Reflow	JESD22-B106	Temp:260°C max T=10sec	3Times	0/22
Life Test	JESD22-A108	Ta=25°C ±5°C IF=150MA	1000 hrs	0/22
High Temperature High Humidity Life Test	JESD22-A101	85°C ±5°C /85%RH IF=100mA	1000 hrs	0/22

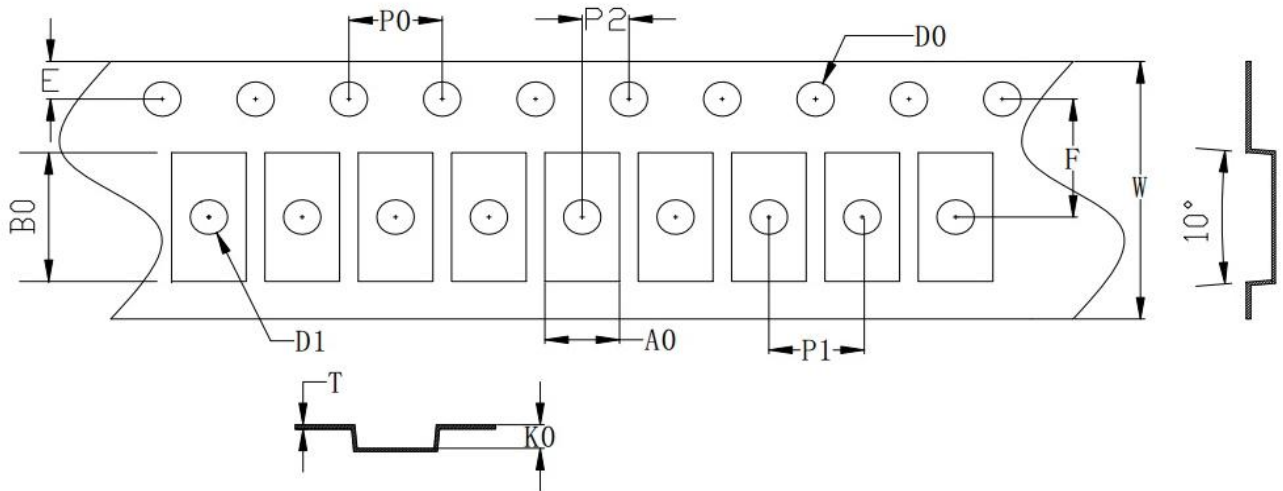
### ◆CRITERIA FOR JUDGING THE DAMAGE

Item	Symbol	Test Conditions	Criteria for Judgement	
			Min.	Max.
Forward Voltage	VF	IF=150mA	—	U.S.L*) × 1.1
Luminous Intensity	Φ V	IF=150mA	LSL × 0.7	

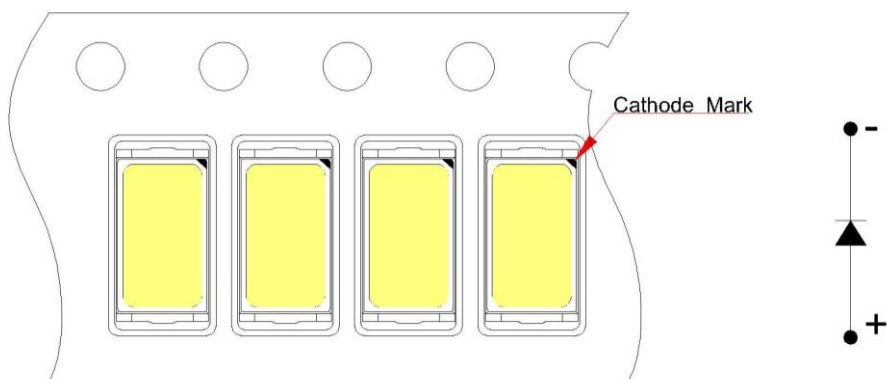
**Note:**
**U.S.L.:Upper Standard Level**
**L.S.L.:Lower Standard Level**

## ◆ Packaging Specifications

### ◆ Taping And Orientation



ITEM	W	A0	B0	KO	E	F	D0	D1	P0	P1	P2	T
DIM	12.00	3.10	6.15	1.30	1.75	5.50	1.60	1.60	4.00	4.00	2.00	0.20
TOLE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05



#### NOTE S:

1. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/ELARS-481 specifications
2. 15000PCS/Reel.