

产品规格书SPECIFICATION

顾客名称 Customer	产品名称 Product	Chip LED
顾客型号 Customer Type	产品型号 Type	NCD0805R1
顾客部品号 Customer No.	版本号 Version NO	А 版





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Re	客户(加盖公章) Customer(Stamp)		
制 定 DRAW	审 核 CHECK	批 准 APPROVE	确 认 CONFIRM
(李友民	集明军	

发放日期 (Release Date): 2019-10-30





NCD0805R1

Chip Light Emitting Diode

技术数据表 Technical Data Sheet

本产品主要作为信号指示及照明的电子元件广泛应用于各类使用表面贴装结构的电子产品中,如家用电器的 开关指示灯、手机键盘灯、汽车仪表盘指示灯等。

This product is generally used as indicator and luminance for surface mounted electronic equipment, such as household appliance, communication equipment, and dashboard.

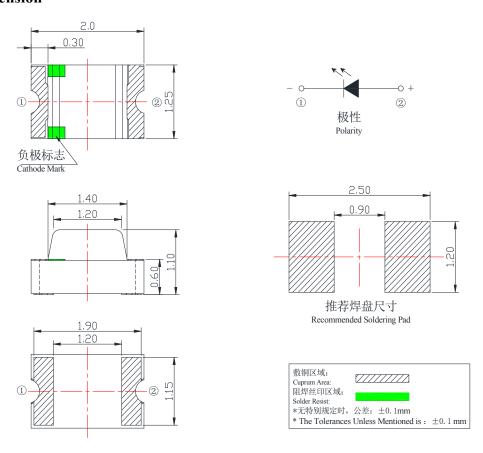
Complied With ROHS Directive

* 产品规格如因工艺改进而有所改变, 恕不另行通知。

* The specifications of the product may be modified for improvement without notice.

外形尺寸

Outline Dimension







_ 光电参数(1)

Electro-Optical Characteristics(1)

极限参数 (温度=25℃)

Absolute Maximum Ratings (Temperature=25°C)

参数名称	符号	数值	单位
Parameter	Symbol	Rating	Unit
正向电流 Forward Current	I_{F}	25	mA
正向脉冲电流* Pulse Forward Current*	I_{FP}	50	mA
反向电压 Reverse Voltage	V_R	5	V
工作温度 Operating Temperature	T_{OPR}	-30 ~ +85	$^{\circ}$
贮存温度 Storage Temperature	Tstg	-40 ~ +100	${\mathbb C}$
功耗 Power Dissipation	P_{D}	65	mW

^{*} 注: 脉冲宽度≤0.1ms, 占空比≤1/10 * Note: Pulse Width≤0.1ms, Duty≤1/10

光电参数(温度=25℃)

Electro-Optical Characteristics (Temperature=25°C)

参数名称	符号	条件	最小值	典型值	最大值	单位
Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
反向电流	I_R	V _R =5V	_	_	10	пΛ
Reverse Current	1K	V R−3 V		_	10	μA
视角度	$2\theta_{1/2}$			130	-	deg.
View Angle	201/2	-				
正向电压	$ m V_F$		1.6	2.0	2.6	V
Forward Voltage	V F		1.0	2.0	2.0	V
峰值波长	$\lambda_{ m P}$			630		nm
Peak Wavelength	ΛP		-	030	-	nm
主波长	3.	$\lambda_{\rm d}$ $I_{\rm F}=20{\rm mA}$	615	620	630	nm
Dominant Wavelength	Λd	IF-ZUIIIA	013	020	030	nm
半波宽度	Δλ			15		nm
Spectrum Radiation Bandwidth	$\Delta \lambda$		_	13	-	nm
光强	I_{V}		67	115	195	mcd
Luminous Intensity	1V		0/	113	193	incu

^{*} 注 1: 光强偏差±15%; 压降偏差±0.1V; (X,Y)坐标偏差±0.01; 单色光波长偏差±1nm。

^{*} Note1: Tolerance on each Luminous Intensity bin is $\pm 15\%$; Tolerance on each Forward Voltage bin is ± 0.1 V; Tolerance on each Hue(X,Y) bin is ± 0.01 ; Tolerance of Dominant Wavelength ± 1 nm.

^{*}注 2:以上参数仅供参考,请以实物标签为准。我司给出的参数均由国星测试系统测得。

^{*} Note2: The parameters above are only for your reference. In case of any discrepancy, please adhere to the label of our actual products. All parameters are tested by the standard testing system of NationStar.





光电参数(2)

Electro-Optical Characteristics(2)

◇ 正向电压(温度=25℃,测试电流=20 mA)

Forward Voltage (Ta=25°C,IF=20mA)

典型电压档范围					
Voltage Classification Range					
	1.8-2.0 V				
V_{F}	2.0-2.2 V				
	2.2-2.4 V				

◇ 光强(温度=25℃,测试电流=20 mA)

Luminous Intensity (Ta=25°C,IF=20mA)

典型光强档范围				
Luminous Classification Range				
$I_{ m V}$	67-88 mcd			
	88-115 mcd			
	115-150 mcd			
	150-195 mcd			

◆ 主波长(温度=25℃,测试电流=20 mA)

Dominant Wavelength (Ta=25°C,IF=20mA)

典型波长档范围					
Dominant Wavelength Range					
$\lambda_{ m d}$	615-620 nm				
	620-625 nm				
	625-630 nm				

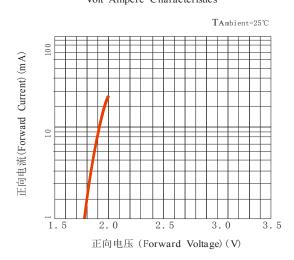




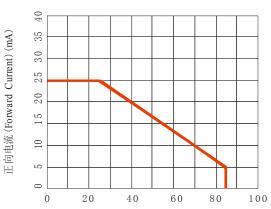
典型特性曲线

Typical Characteristics Curves

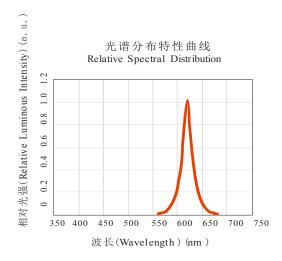
伏安特性 Volt-Ampere Characteristics



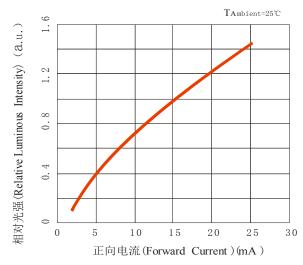
正向电流降额曲线 Forward Current Derating Curve



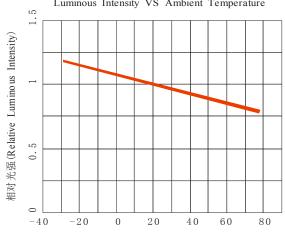
环境温度(Ambient Temperature)(℃)



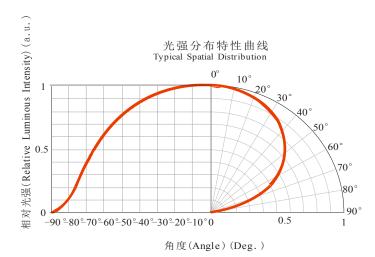
相对光强与正向电流特性 Relative Luminous Intensity VS Forward Current



光强与环境温度曲线 Luminous Intensity VS Ambient Temperature



环境温度(Ambient Temperature)(℃)







可靠性试验

Reliability Test Items And Conditions

实验项目	参考标准	实验条件	时间	样品数	判据
Test Items	Reference	Test Conditions	Time	Quantity	Criterion
冷热冲击 Thermal Shock	MIL-STD-202G	-40°C(15min)←→100°C(15min)	循环 200 次 200 cycles	22	0/22
湿热循环	JEITA ED-4701	(-10∼65)°C , (0∼90)%RH	循环 10 次	22	0./22
Cyclic Cyclic	Temperature And Humidity Cvclic 200 203 24hrs./		10 cycles	22	0/22
高温贮存 High Temperature Storage	JEITA ED-4701 200 201	Ta=100°C	1000h	22	0/22
低温贮存 Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000h	22	0/22
常温寿命试验 Lifespan Test	JESD22-A108D	Ta=25 °C I _F =10mA	1000h	22	0/22
耐焊接热 Resistance to Soldering Heat	GB/T 4937, II ,2.2&2.3	Tso1*=260°C 10secs.	2次 2 times	22	0/22

失效判断标准 Criteria For Judging Damage

测试项目	符号	测试条件	判定标准
Test Items	Symbol	Test Conditions	Criteria For Judging Damage
正向电压 Forward Voltage	V_{F}	$I_F = I_{FT}$	初始值±10% Initial Data±10%
反向电流 Reverse Current	I_R	V _R = 5V	I _R ≤10μA
光强 Luminous Intensity	$I_{ m V}$	$I_{\mathrm{F}}=I_{\mathrm{FT}}$	Iv 衰减≤50% IV degradation≤50%
耐焊接热 Resistance to Soldering Heat			无死灯 No dead light

*注: Tsol-锡液温度; IFT: 典型电流

* Note: Tsol-Temperature of tin liquid; IFT: Typical current.

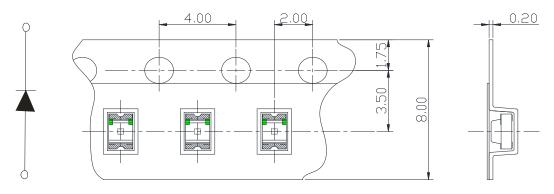




包装(1)

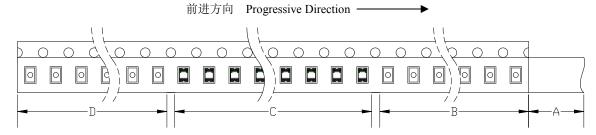
Packaging (1)

♦ 载带 Carrier Tape



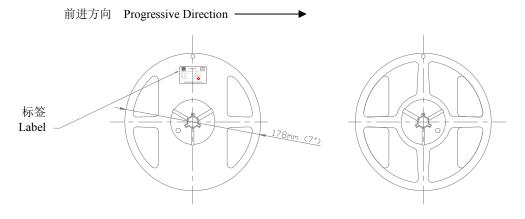
单位:mm,未注公差: ± 0.1 mm All dimensions in mm, tolerances unless mentioned is $~\pm 0.1$ mm.

◆ 编带细节 Details Of Carrier Tape



A: 盖带, 200 mm; B: 引导, 空带, 100mm; C: 编载产品 3000 只; D: 尾部, 空带, 100mm A: Top Cover Tape, 200mm; B: Leader, Empty, 100mm; C:3000 Lamps Loaded; D: Trailer, Empty, 100mm.

◆ 带盘 Reel Dimension



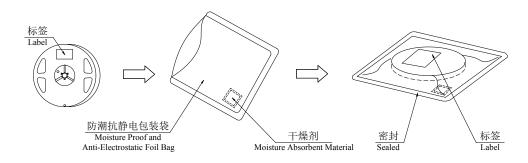




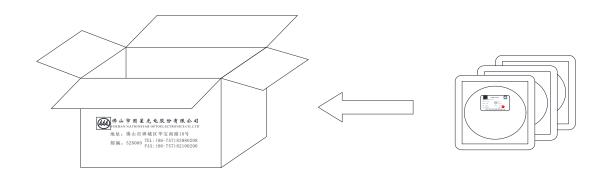
包装(2)

Packaging(2)

♦ 防潮抗静电包装 Moisture Proof and Anti-Electrostatic Foil Bag



◆ 外包装箱 Cardboard Box



♦ 标签说明 Label Explanation

TYPE: 产品型号

QTY: 数量 Quantity

BIN: 分档 Rank

SC: 分档编号 Step Code

LOT: 批号 Lot Number

λd: 波长范围 Wavelength Range

IV: 光强范围 Luminous Intensity Range

VF: 正向电压范围 Forward Voltage Range

IF: 测试电流 Testing Current

