

规格书

SPECIFICATION

品 名	Ø10圆头有边长脚红发红发光管
型 号	
客户型号	10R3HD00

客户确认/日期	审核/日期	工程/日期	品管/日期

1. 表述 Description

型号 Part Number	发光颜色 Color	胶体颜色 Lens Color	芯片材质 Chip Material
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10R3HD00	Red	Red diffuse	GaAlAs
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2. 绝对最大额定值 Absolute Maximum Ratings

(Ta=25°C)

项目 Parameter	符号 Symbol	额定值 Ratings	单位 Unit
功率消耗 Power Dissipation	P _D	60	mW
正向电流 Forward Current	I _F	30	mA
正向电流峰值 Pulse Forward Current	I _{FP}	80	mA
反向电压 Reverse Voltage	V _R	5	V
操作温度 Operation Temperature	T _{opr}	-30 ~ +85	° C
贮存温度 Storage Temperature	T _{stg}	-30 ~ +85	° C
焊接时间 Soldering Temperature *2	T _{sol}	Max. 260°C for 5sec	

Note: *1 I_{FP} Conditions = Duty ratio≤1/8, and Pulse width≤0.1ms

*2 At the position of 2mm from the bottom face of LED package

3. 电性/光学特性 Electrical / Optical Characteristics

(Ta=25° C)

项目 Parameter	符号 Symbol	测试条件 Condition	值 Value			单位 Unit
			Min	Typ	Max	
正向电压 Forward Voltage	V _F	IF=20mA	1.8	2.0	2.2	V

主波长 Dominant Wavelength	λ_d	IF=20mA	645	---	655	nm
反向电流 Reverse Current	I_R	$V_R=5V$	---	---	10	uA
发光角度 Viewing Angle* ¹	$2\theta_{1/2}$	X-axis	---	40	---	deg
发光亮度 Luminous Intensity	I_v	IF=20mA	---	90	---	mcd

Note *1 : $\theta_{1/2}$ is the off-axis where the luminous intensity is $1/2$ the peak intensity.

4. 可靠性测试 Reliability Test

项目 Item	测试条件 Condition	时间 Time	Number of Damage
寿命测试 Life Test	$T_a = RT.$, $t = 1000hr$, $If = 30mA$	1000Hrs	0/22
High Temperature Operating	$T_a = +85^\circ C$, $t = 500hr$, $If = 8mA$	1000Hrs	0/22
Low Temperature Operating	$T_a = -40^\circ C$, $t = 1000hr$, $If = 20mA$	1000Hrs	0/22
Temperature Cycle	$T_a = -40^\circ C \sim +85^\circ C$ (1Cycle = 1hr)	100Cycles	0/22
Resistance To Soldering Heat	$T_s = 260 \pm 5^\circ C$, $t = 5 \pm 1sec$	1Time	0/22

5. 封装尺寸 Package Dimension

(Note) 1. All dimensions are in millimeters.

2. Tolerance is $\pm 0.25\text{mm}$, Unless otherwise specified.

