

● 红外平行光LED

Infrared LED emitting collimated light

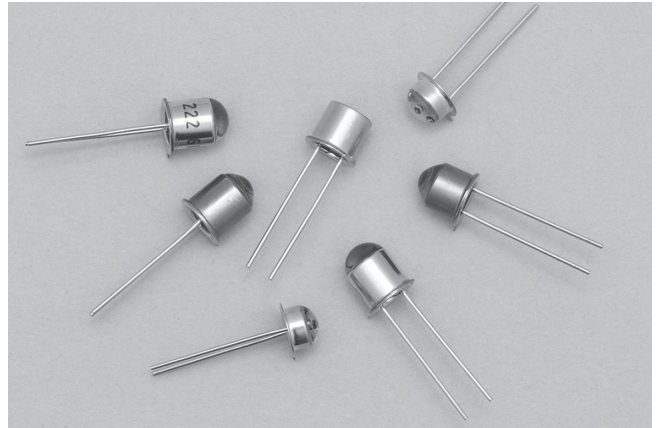
编码器用高亮度,高精度,高稳定性的红外LED系列。产品线包括罐状型、基板贴片型。

High precision, high definition, and high reliability infrared LED series for encoder. CAN type and SMD type available.

特性

Application

- 罐状型 LED 通过封装非球面玻璃透镜,可实现平行光和高稳定性
- 基板贴片型 (RLD414) 采用非球面树脂透镜,可实现高精度的红外平行光
- CAN Type: Hermetic seal attains high reliability.
- SMD Type (RLD414): One of a kind aspheric lens provides excellent parallelism and flatness.

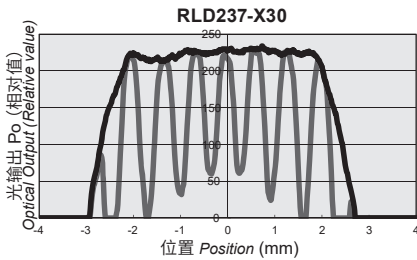


用途

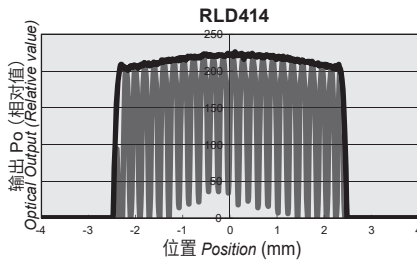
Application

- 旋转编码器光源
- 光电开关
- 工业自动化设备
- Light source for encoder
- Switch of light
- Automated industrial machine

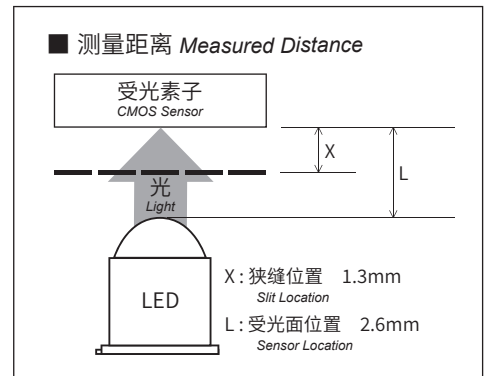
● 狭缝特性比较



※狭缝形状 Slit pattern (开口/宽度 Hole/ Mask 0.35mm each)



※狭缝形状 Slit pattern (开口/宽度 Hole/ Mask 0.09mm each)



● 绝对最大额定值 Absolute Maximum Ratings

Ta=25°C

项目 Item	符号 Symbol	额定值 Rating					单位 Unit	备注 Remarks column
		RLD222-A	RLD223	RLD288	RLD237-X30	RLD414		
正向电流 Forward Current	IF	100	100	100	80	50	mA	
直流正向电流降低率	-	1	1	1	0.67	0.92	mA/°C	Ta = 25°C以上
脉冲正向电流 Pulse Forward Current	IFP	1	1	-	-	-	A	tw=100ms, T= 10ms
反向电压 Reverse Voltage	VR	6	6	3	5	5	V	
容许损失 Power Dissipation	P	200	200	200	150	200	mW	
工作温度 Operating Temperature	Topr	-40~125	-40~125	-20~100	-30~85	-40~105	°C	
保存温度 Storage Temperature	Tstg	-55~125	-55~125	-30~100	-40~100	-40~105	°C	
焊接温度 Soldering Temperature	Tsold	260	260	260	260	无引脚	°C	※ 有条件

※在距离引线根部2mm以上的位置, 5秒以内

● 电光学特性 Electro-Optical Characteristics

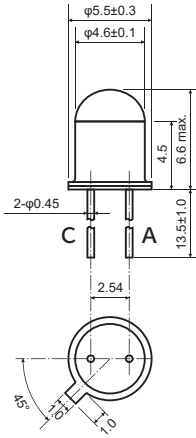
Ta=25°C

项目 Item	符号 Symbol	RLD222-A				RLD223				RLD288				单位 Unit
		min.	typ.	max.	条件 Condition	min.	typ.	max.	条件 Condition	min.	typ.	max.	条件 Condition	
正向电压 Forward Voltage	VF	-	1.55	2	IF=100mA	-	1.55	2	IF=100mA	-	1.55	2	IF=50mA	V
反向电流 Reverse Current	IR	-	-	10	VR=6V	-	-	10	VR=6V	-	-	10	VR=3V	µA
峰值发光波长 Peak Wavelength	λp	-	910	-	IF=100mA	-	910	-	IF=100mA	-	910	-	IF=50mA	nm
光谱半宽 Spectral Half Width	Δλ	-	80	-	IF=100mA	-	80	-	IF=100mA	-	80	-	IF=50mA	nm
辐射通量 Radiant Flux	Po	8	10	-	IF=100mA	6	8	-	IF=100mA	5	9	-	IF=50mA	mW

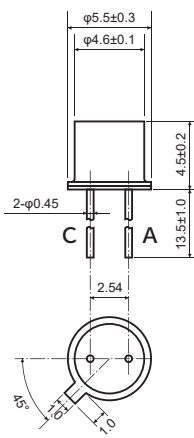
项目 Item	符号 Symbol	RLD237-X30				RLD414				单位 Unit
		min.	typ.	max.	条件 Condition	min.	typ.	max.	条件 Condition	
正向电压 Forward Voltage	VF	-	1.55	1.7	IF=20mA	-	1.55	1.8	IF=20mA	V
反向电流 Reverse Current	IR	-	-	10	VR=5V	-	-	10	VR=5V	µA
峰值发光波长 Peak Wavelength	λp	-	870	-	IF=20mA	820	850	880	IF=20mA	nm
光谱半宽 Spectral Half Width	Δλ	-	40	-	IF=20mA	-	30	-	IF=20mA	nm
辐射通量 Radiant Flux	Po	-	2	-	IF=20mA	2.5	3.5	5.5	IF=20mA	mW

●外形尺寸
Dimensions

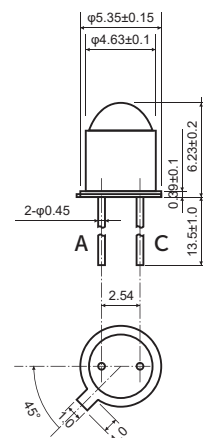
RLD222-A



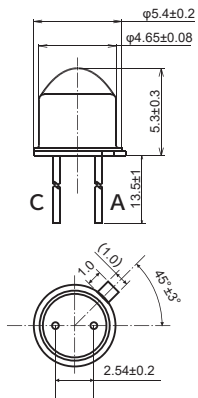
RLD223



RLD288



RLD237-X30



RLD414

