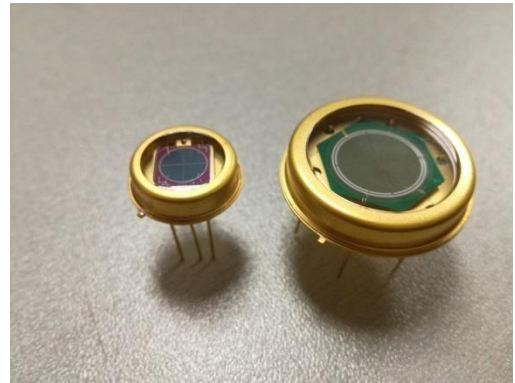


HL32414Y/HL32415Y 四象限探测器 (HL32414Y/HL32415Y Four quadrant detecto)

器件为四个相同单元器件，在反向偏置条件下工作，光谱响应范围从可见光到近红外，峰值响应波长 980nm, 在 1064nm 响应可达 0.5A/W。



The device is four same unit devices, which operate under reverse bias conditions. The spectral response range is from visible light to near-infrared light, the peak response wavelength is 980nm, and the response at 1064nm can reach 0.5A/W.

◆ 特点 Features

- 低暗电流
Low dark current
- 高响应度
High responsiveness
- 象限一致性好
Good quadrant consistency
- 盲区小
Small blind area

◆ 应用 Applications

- 激光瞄准、制导跟踪及探索装置
Laser aiming, guidance, tracking and exploration device
- 激光微定位、位移监控等精密测量系统
Laser micro positioning, displacement monitoring and other precision measurement systems

◆ 结构/最大绝对额定值 Structure/maximum absolute rating

器件型号 Device model	封装形式 Packaging form	光敏面尺寸 Photosensitive surface ruler (mm)	最大工作电压 Maximum operating voltage (V)	工作温度 Operating temperature and pressure (°C)	储存温度 Storage temperature (°C)	焊接温度 welding temperature (°C)	饱和光功率 Saturated optical power (W/cm ²)
HL32414Y	T0-8	Φ5.3	150	-45~100	-55~125	260	0.3
HL32415Y	MBCY026-W7W	Φ11.5	180				

◆ 光电性能 Photoelectric performance (@Ta=25°C)

器件型号 Device model	光谱响应范围 Spectral response range (nm)	峰值响应波长 Peak response wavelength (nm)	响应度 Responsiveness λ=1064nm (A/W)		暗电流 Electronics V _R =140V (nA)	上升时间 λ=1064nm V _R =140V R _L =50Ω (ns)	结电容 Event (pF)	象限间距 Quadrant spacing (μm)	串扰 crosstalk (%)		击穿电压 breakdown voltage (V)
			典型	最大					典型	最大	
HL32414Y	400~1150	980	0.5	0.55	4.8	15	4.2	70	1	2	≥300

器件型号	光谱响应范围 Spectral response range (nm)	峰值响应 波长 Peak response wavelength (nm)	响应度 Responsiveness $\lambda = 1064\text{nm}$ (A/W)		暗电流 $V_R=180\text{V}$ Electronics (nA)	上升时间 $\lambda = 1064\text{nm}$ $V_R=180\text{V}$ $R_L=50\Omega$ (ns)			结电容 Event $V_R=180\text{V}$ $f=1\text{MHz}$ (pF)	象限间距 Quadrant spacing (μm)	串扰 crosstalk (%)	击穿电 压 breakdown voltage (V)
			典型	最大		最小	典型	最大				
HL32415Y	400~1150	980	0.5	0.55	≤ 20	15	20	25	10	130	1	≥ 200

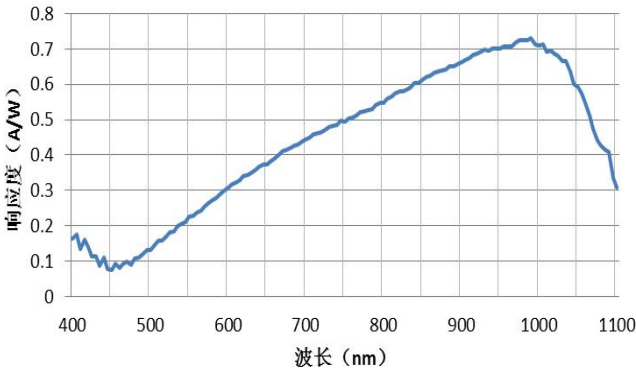
◆ 低温下响应度数据 Responsiveness data at low temperature

温度 temperature ($^{\circ}\text{C}$)	22	10	0	-10	-20	-30	-40	-45
响应度 responsibility (A/W)	0.53	0.48	0.46	0.42	0.39	0.36	0.32	0.3

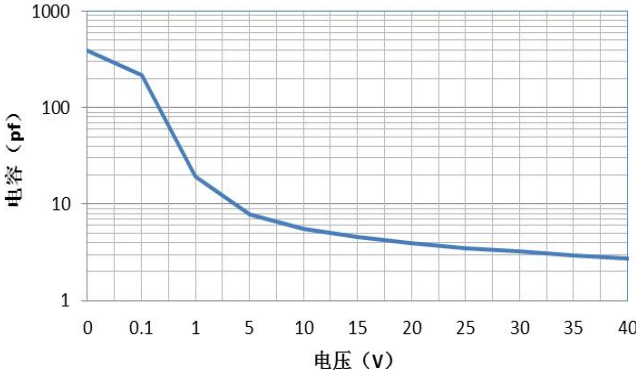
◆ 典型特性曲线 Typical characteristic curve

◆ HL32414Y 特性曲线 (HL32414Y Typical characteristic curve)

光谱响应曲线

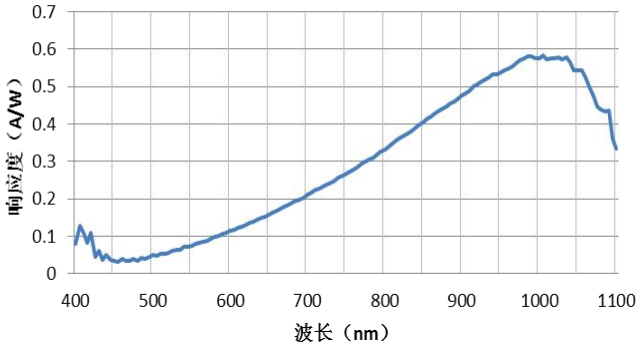


C-V曲线



◆ HL32415Y 特性曲线 (HL32415Y Typical characteristic curve)

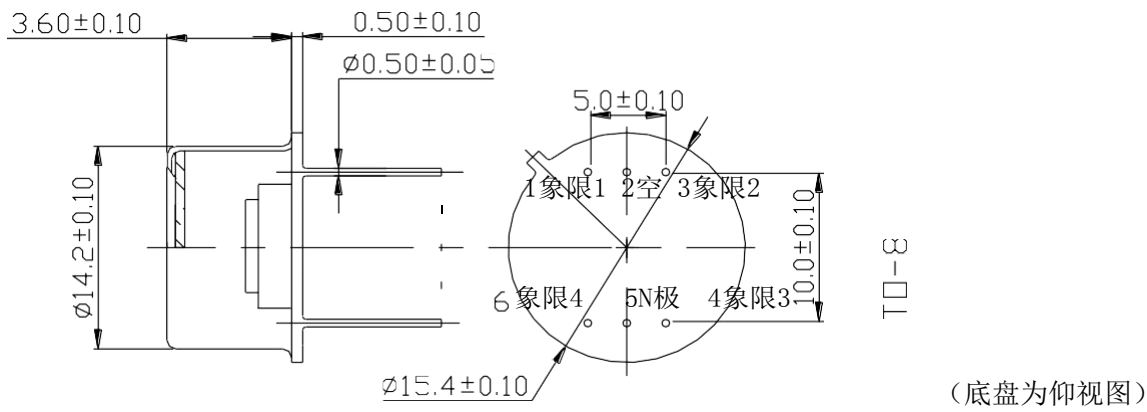
光谱响应曲线



◆ 封装外形、尺寸及引脚定义

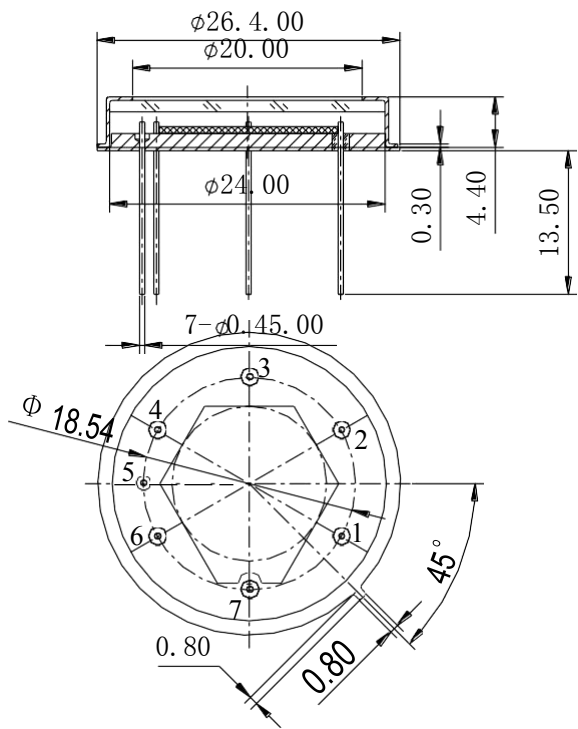
Package shape, size and pin definitio

■ HL32414Y



引脚	1	2	3	4	5	6
定义	象限 1	空	象限 2	象限 3	共 N 极	象限 4

■ HL32415Y



引脚	1	2	3	4	5	6	7
功能	象限 4	象限 1	环	象限 2	壳体	象限 3	P 电极

◆ 应用电路 Application circuit

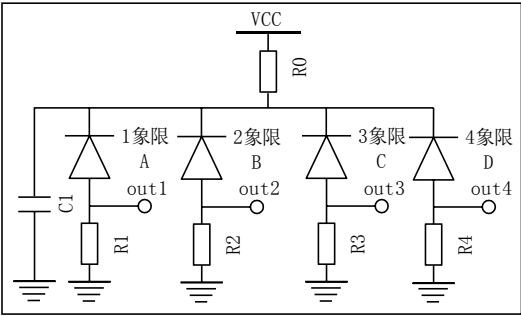


图 3 应用电路图

◆ 注意事项 note

- 器件属于静电敏感器件，请在静电安全环境下操作。
Device belongs to electrostatic sensitive device, please operate in electrostatic safe environment

◆ 联系方式 Contact information

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