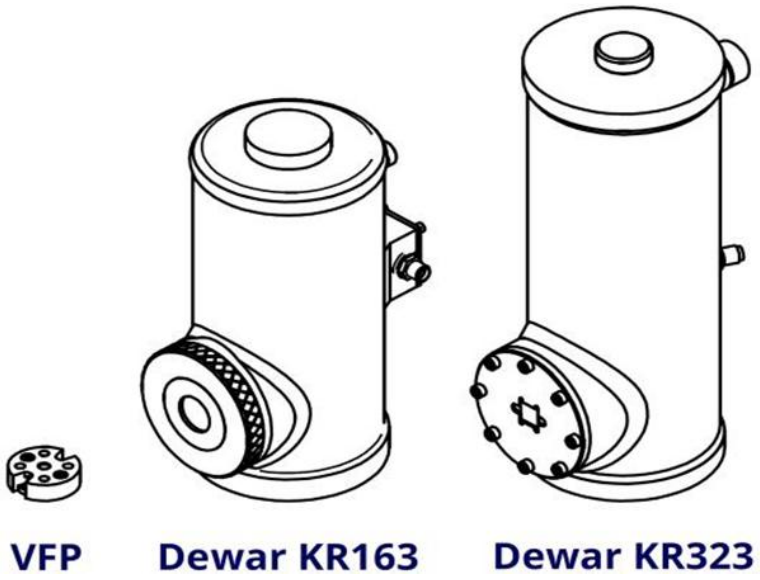
液氮制冷 2-18um MCT 探测器



产品特点

针对 77 K 工作温度优化的有源元件材料 、 te 别设计的扁平封装（无窗口），可轻松在液氮金属杜瓦瓶中自行组装 、 可由 VIGO Photonics 组装在液氮金属杜瓦瓶（Kadel KR163-FSMA2、Kadel KR-323）中（根据要求） 、 可提供 0.25 mm × 0.25 mm 的有效面积尺寸（根据要求） 、 可提供其他接收角值（根据要求）

产品型号

PC-LN2-16.6-1x1-VFP-NW-50

应用领域

FTIR 光谱

核心参数

光谱响应	光敏面
2.0 - 18.1μm	1mmx1mm

详细参数

系列配置:

PN#	制冷	温度传感器	光敏面，A，mm×mm	光学浸没	封装	接受角，Φ, deg.	窗口
PC-LN2-16.6-1x1-VFP-NW-50	LN2 (for operation in 77 K)	no	1x1	no	VFP (flatpack)	50	no

规格(Tamb = 293 K, Tchip = 77 K, Ib = 15 mA)

PN#	峰值波长	截止波长 (10%)	探测能力	电压响应度	阻抗	偏置电流
	λpeak	λcut-off	D*(λpeak, 20kHz)	Rv(λ peak)	R	Ib
	μm	μm	cm·Hz1/2/W	V/W	Ω	mA
	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
PC-LN2-16.6-1x1-VFP-NW-50	14.3	18.1	1.5×1010	500	40	15

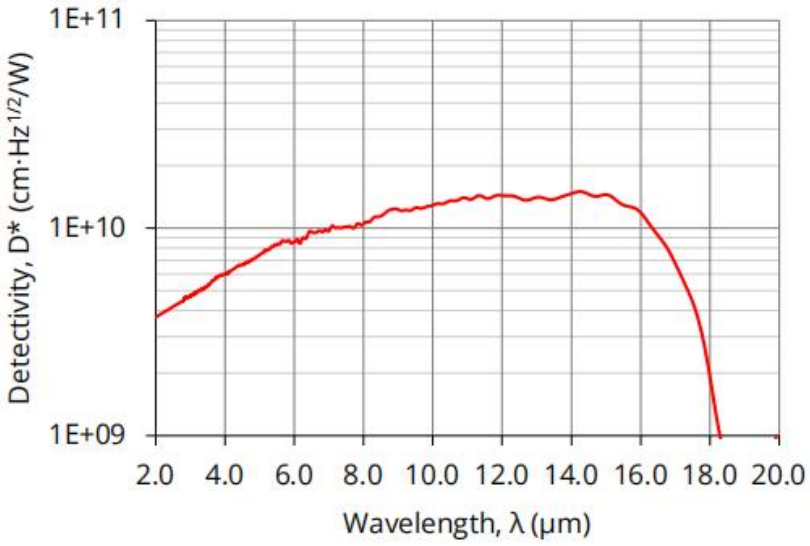
jue 对 Max. 额定值:

参数	测试条件及备注	值	单位
环境工作温度，Tamb	在环境温度 (Tamb) > 30°C 的条件下操作可能会增加杜瓦瓶中的液氮消耗量	-20 to 30	°C
储存温度，Tstg		-20 to 50	°C

储存湿度	无结露	10 to 90	%
Max. 入射光功率密度	连续波 (CW) 或单脉冲，持续时间 > 1 μs	100	W/cm2
	单脉冲，持续时间 < 1 μs	1	MW/cm2
Max. 偏置电流，Ib max	测试条件及备注	25	mA

特性曲线

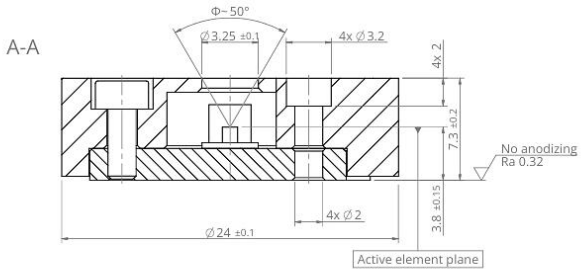
光谱响应 (Typ., Tamb = 293 K, Tchip = 77 K, Ib = 15 mA)

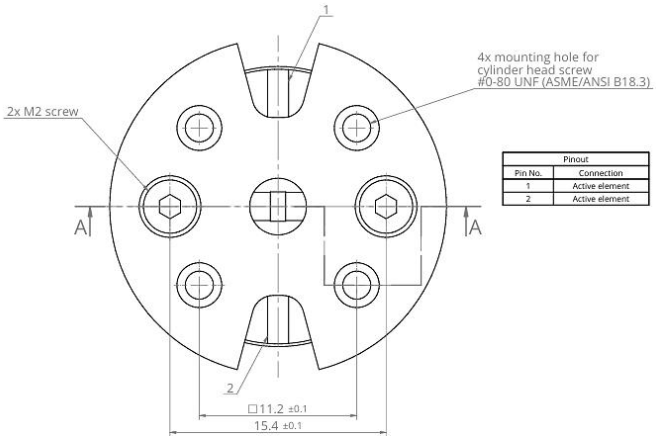


尺寸图

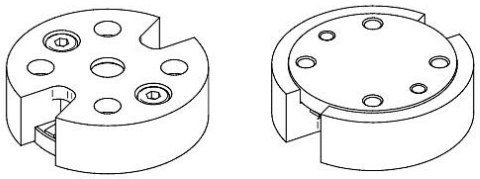
机械布局和信号输出

LN2-VFP(2p)，PC 探测器技术图纸





Pinout	
Pin No.	Connection
1	Active element
2	Active element



Notes:
1. Black anodized surfaces (MIL-A-8625 TYPE II CLASS 2)

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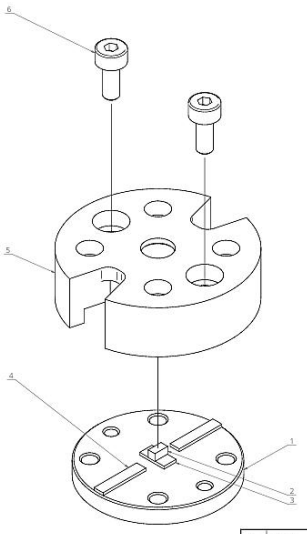
Date	Drawing No.		Rev.	Title	
27.01.2025	ZTMS-LN2-Z360.10.1		1	LN2-VFP(2p), PC detector	



Part No.	Name of part	Material	Quantity
6	M2 screw	Stainless steel	2
5	Catchfield	Anodized aluminum	1
4	Pads	Metalized sapphire	2
3	Active element carrier	Sapphire	1
2	Active element	HgCdTe/GaAs	1
1	Spacer	Anodized aluminum	1

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Date	Drawing No.		Rev.	Title	
27.01.2025	ZTMS-LN2-Z360.10.1		1	LN2-VFP(2p), PC detector	