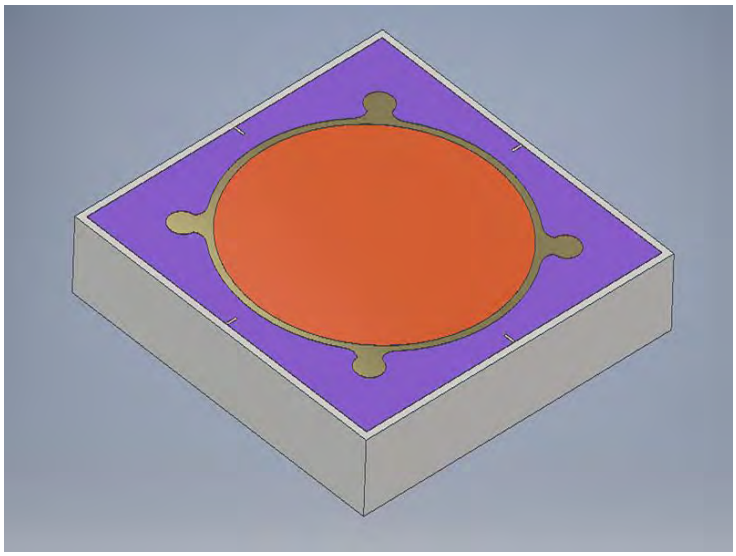
1mm InGaAs PIN photodiode series chips



Description

InGaAs PIN photodiode series chips with low capacitance and large photosensitive surface are front-facing planar structures, and provide various models with φ1mm, φ2mm, medium 3mm, φ5mm circular photosensitive surfaces and 1.5mm×6mm square photosensitive surfaces. Some models provide low-capacitance versions with Features such as high bandwidth, high sensitivity, and high reliability can meet the requirements of hotoelectric alarm, laser.

Features

- Provide ultra-low low capacitance option
- Active area 1mm~5mm
- Provide chip or TO package
- Accept customized requirements

Application

- Photoelectric alarm
- Optical power meter
- Instrumentation
- Lidar

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Specifications

Main performance indicators

Technical indicators	Symbol	Unit	category	Model													
				LP-LC1			LP-LC2			LP-LC3			LP-LC5			LP-LC1.5		
								Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max
Active Area		mm	Ordinary	φ1			φ2			φ3			φ5			1.5×6		
			low capacitance															
Response time*	t	ns	Ordinary		5			17			35			117			45	
			low capacitance		2			9			17						22	
-3dB Bandwidth	f_3 dB	MHz	Ordinary		75			20			10			3			10	
			low capacitance		150			40			20			7			20	
Capacitance	Cv	pF	Ordinary	40 @1V			130@1V			300@1V			850 @1V			1100@1V		
			low capacitance	25@1V			70@1V			180 @1V			400@1N			520@1V		
	Cv		Ordinary	30 @5V			100 @5V			200 @5V			750 @2V			960 @2V		
			low capacitance	15 @5V			50 @5V			100@5V			300 @2V			380 @2V		
	Cv		Ordinary	20 @25V			75 @25V			170@25V			600@5V			770@5V		
			low capacitance	10 @25V			35 @25V			90@25V			200@5V			260@5V		
Reverse breakdown voltage	V	V	Ordinary	20			15			10			10			10		
			low capacitance	10			10			10			10			10		
Dark Current	Io	nA	Ordinary		1			2			5			20			30	
			low capacitance		3			6			15			60			100	

Quality reliability, The product meets the requirements of Telcordia-GR-468-CORE for product reliability.

Absolute Maximum Ratings

Technical indicators	Symbol	Index value	Unit
Average forward current	I	100	mA
Total power consumption	PTon	100	mW
Average photocurrent	Ip	100	mA
Storage temperature	Tstg	-60~125	℃
Operating temperature	T	-40~85	℃
Soldering temperature	Tp	260	℃

*Pin soldering only, 5s

Technical indicators	Symbol	Min	Typ	Max	Unit
Operating Voltage	Vop	0	5	VBR-5	V
Spectral range	△λ	900		1700	nm
Responsiveness	R1064	0.60	0.65		A/W
	R1550	0.95	1.05		A/W

Specifications and dimensions (Unit in μm)

