

KP-H InGaAs Photodiode

KPDEH16LC

InGaAs photodiodes that enable ultra-fast response. The incidence of the laser light is improved by integrating the photodiode with a condensing lens and ensuring an optical alignment tolerance of $\pm 30\mu\text{m}$.

*Please contact us if you have any requests regarding the receiving diameter size, entrance surface (front and back), presence or absence of lenses, etc.

Characteristics

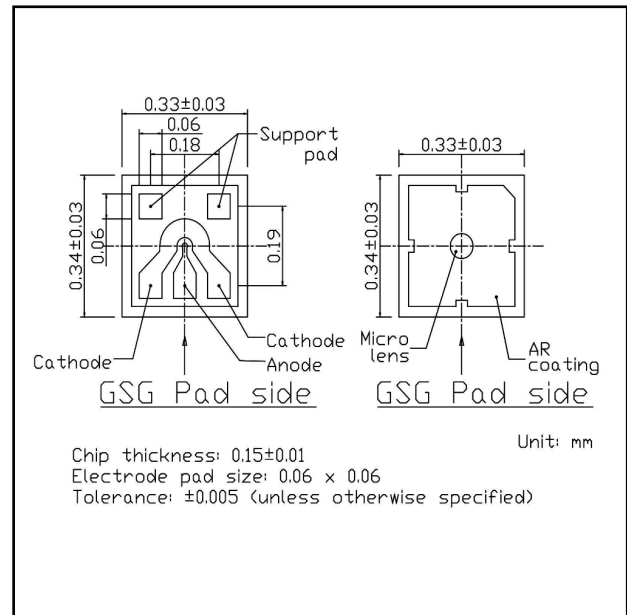
- Achieving $40\mu\text{m}$ light receiving diameter by using integrated condensing lens
- Ultra-fast response.
- High reliability

Applications

- 400GbE (PAM4) / 100GbE
- 400Gbps / 200Gbps / 100Gbps Digital coherent system

Package

- CHIP



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	10	V	-
Reverse Current	I_R	10	mA	-
Maximum optical power input	P_{imax}	5	mW	-
Forward current	I_F	5	mA	-
Operating temperature	T_{opr}	-40 to +100		Avoid dew condensation
Storage temperature	T_{stg}	-40 to +100		Avoid dew condensation

Electrical and Optical characteristics (Ta=25 °C, $V_R=2V$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Effective active diameter	D	-	40	-	μm	-
Sensitive wavelength		900	-	1700	nm	-
Bandwidth	BW	30	32	-	GHz	$V_R=2V$, $\lambda=1310nm$, $R_L=50\Omega$, $P_{in}=0dBm$, Small signal modulation
Responsivity	R	0.63	0.7	-	A/W	$V_R=2V$, $\lambda=1310nm$, $P_{in}=0dBm$
Dark current	I_D	-	20	100	nA	$V_R=2V$

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