

KP-A InGaAs Avalanche Photodiodes

KPDEA007-56F

InGaAs avalanche photodiode
5.6mm CAN package with flat window cap

Characteristics

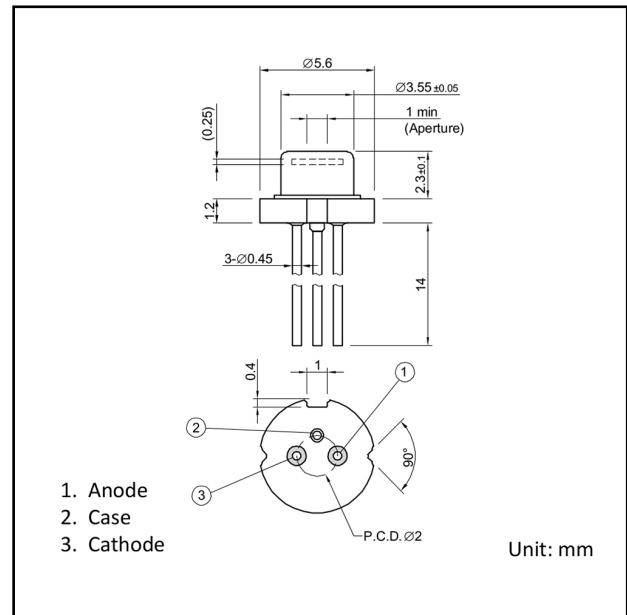
- High speed (Up to 1.25Gbps)
- Low dark current
- High sensitivity

Applications

- SONET
- GE-PON

Package

- TO-CAN



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse Current	I_R	2	mA	-
Forward current	I_F	10	mA	-
Operating temperature	T_{opr}	-40 to +85		Avoid dew condensation
Storage temperature	T_{stg}	-40 to +85		Avoid dew condensation

Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	D	-	75	-	μm	-
Bandwidth	BW	-	2.0	-	GHz	M=10
Responsivity	R	0.80 0.90	0.90 1.05	-	A/W	$\lambda=1310\text{nm}$, M=1 $\lambda=1550\text{nm}$, M=1
Dark current	I_D	-	15	65	nA	$V_R=V_B \times 0.9$
Breakdown voltage	V_{BR}	35	45	55	V	$I_D=10\mu\text{A}$
Temperature coefficient of V_B	V_{BR}/T	0.08	0.1	0.12	V/	-
Chip capacitance	C_{chip}	-	0.54	0.65	pF	f=1MHz
Total capacitance	C_t	-	0.9	1.1	pF	f=1MHz

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