

InGaAs Photodiodes KPDB086S-H8

Characteristics

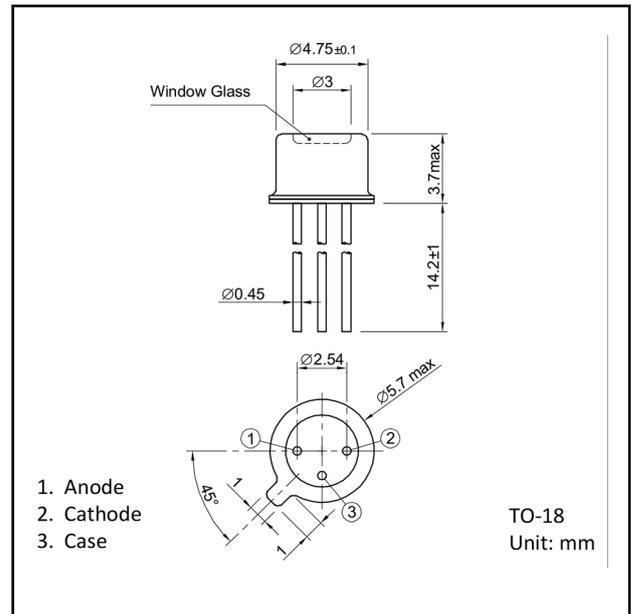
- 0.86mm sq. large sensitive area
- Low dark current
- Low voltage operation

Applications

- Near infrared sensors
- Laser diode and LED power monitors
- Near infrared spectroscopy
- Power meters

Package

- TO-CAN



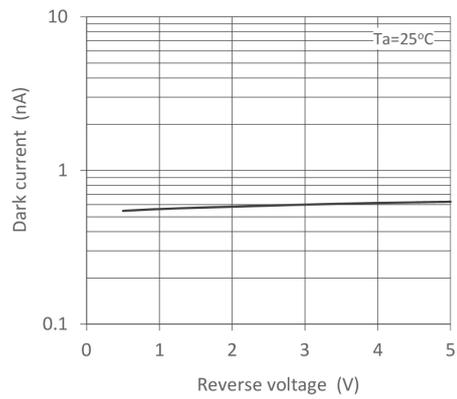
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	5	V	-
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}	-55 to +125		Avoid dew condensation
Soldering temperature	T_{sol}	260		Soldering time less than 5 seconds

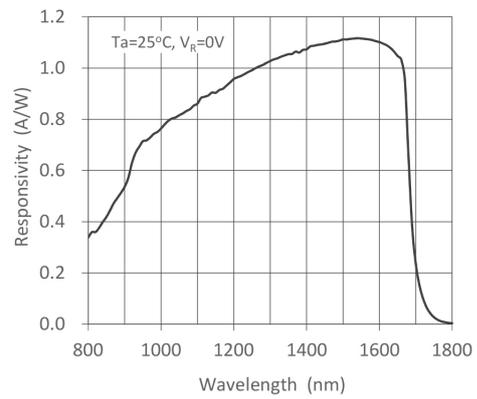
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	0.86 x 0.86	-	mm ²	-
Sensitive wavelength		800	-	1700	nm	-
Bandwidth	BW	-	50	-	MHz	$V_R=1V$ $R_L=50$
Responsivity	R	-	0.45 1.1	-	A/W	$V_R=0V$ =850nm $V_R=0V$ =1550nm
Dark current	I_D	-	1	10	nA	$V_R=1V$
Total capacitance	C_t	-	35	-	pF	$V_R=1V$ $f=1MHz$

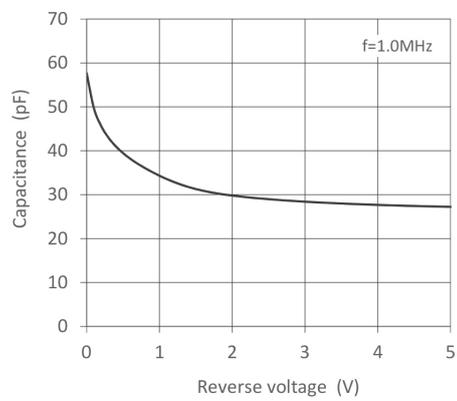
Dark Current - Reverse Voltage



Spectral Responsivity



Capacitance - Reverse Voltage



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