

## KP-M InGaAs Photodiodes for Monitoring KPDE008LS-A-RA-HQ

### Characteristics

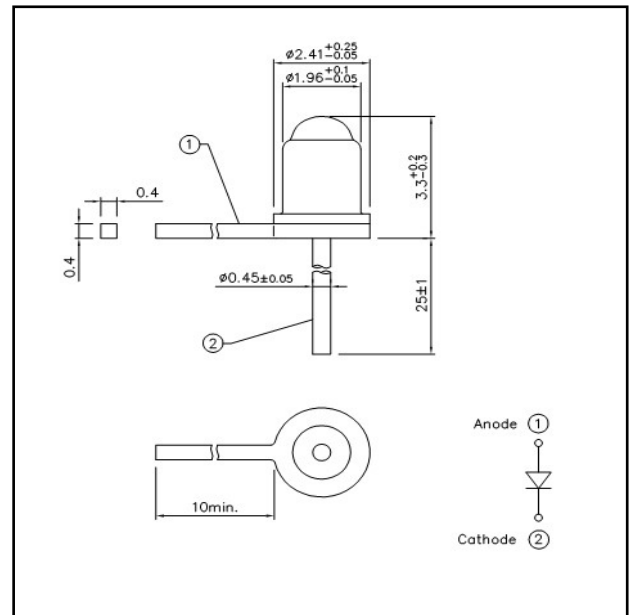
- Small size for high density packaging
- Low capacitance and high speed with a PIN structure
- Low dark current
- High reliability
- Supports a wide wavelength band (O-, E-, S-, C-, L-Band)
- Conducted characteristic inspection at high temperature

### Applications

- Light monitoring

### Package

- TO-CAN



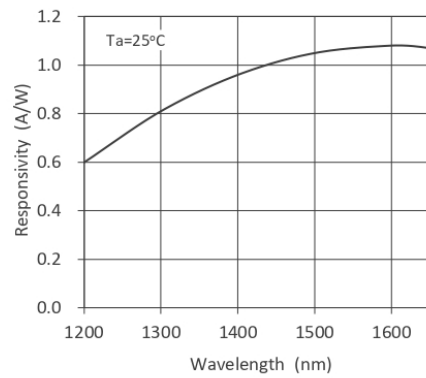
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	$V_R$	20	V	-
Maximum optical power input	$P_{imax}$	10	mW	-
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

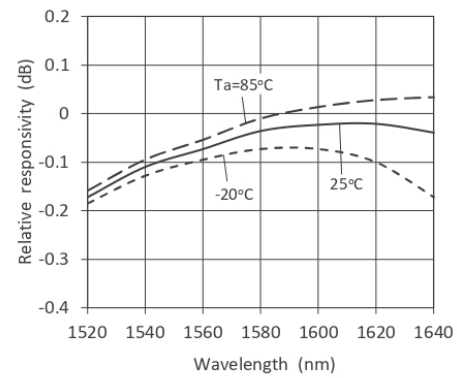
## Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	80	-	$\mu\text{m}$	-
Sensitive wavelength		900	-	1700	nm	-
Bandwidth	BW	-	2	-	GHz	$R_L=50 \quad P_i=-10\text{dBm} \quad V_R=5\text{V}$
Responsivity	R	0.8 0.9	-	-	A/W	$V_R=5\text{V} \quad =1310\text{nm}$ $V_R=5\text{V} \quad =1550\text{nm}$
Dark current	$I_D$	-	-	160	pA	$V_R=5\text{V}$
Total capacitance	$C_t$	-	-	1.1	pF	$V_R=5\text{V} \quad f=1\text{MHz}$
Responsivity uniformity	R	-0.2	-	0.25	dB	$=1530-1610\text{nm}$ $T_{opr}=-10 \text{ to } +85$

**Spectral Response**



**Uniformity of Spectral Response**



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