

Cap Isolated 2-pin Mini Can InGaAs PD



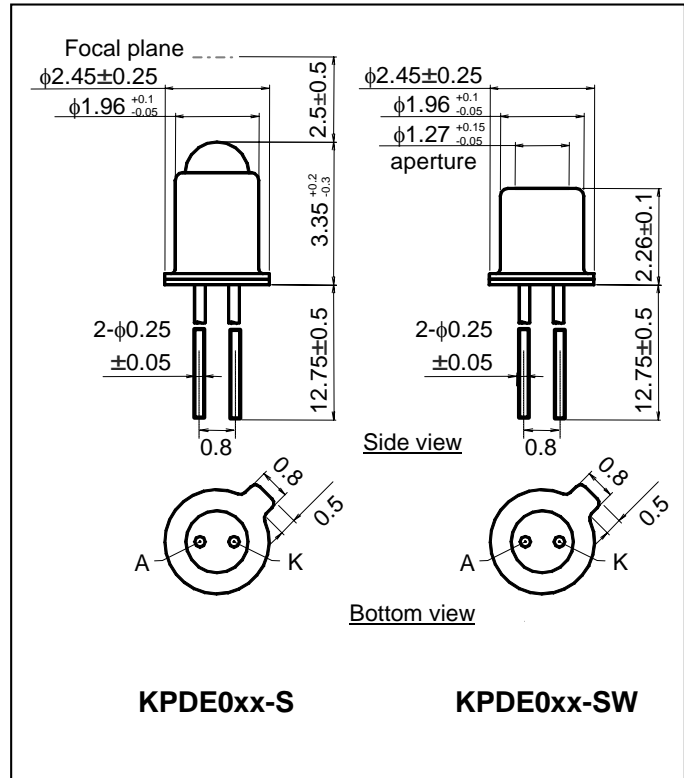
Features

- Cap isolated 2-pin mini can (1.96mm dia.)
- High density packaging of multiple PD channels
- Low capacitance and high speed with a PIN structure
- Low dark current

Applications

- Optical power monitor for WDM
- DWDM system
- Digital optical communication

Dimensions (unit: mm)



Specifications

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	20	V
Maximum Optical Power Input	$P_{i \max}$	10	mW
		20	
		30	
Forward current	I_F	10	mA
Operating temperature	T_{opr}	-40 to +85	°C
Storage temperature	T_{stg}	-40 to +85	°C

1) KPDE008-S

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active diameter	D	80			μm	
Bandwidth	BW		2.0		GHz	$R_L=50\Omega$, $P_i=-10\text{dBm}$, $V_R=5\text{V}$
Responsivity	R	0.8			A/W	$\lambda=1310\text{nm}$, $V_R=5\text{V}$
		0.9				$\lambda=1550\text{nm}$, $V_R=5\text{V}$
Dark current	I_D			160	pA	$V_R=5\text{V}$
Total capacitance	C			1.1	pF	$V_R=5\text{V}$, $f=1\text{MHz}$

2) KPDE020-S

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active diameter	D	200			μm	
Bandwidth	BW		1.0		GHz	$R_L=50\Omega$, $P_i=-10\text{dBm}$, $V_R=5\text{V}$
Responsivity	R	0.8			A/W	$\lambda=1310\text{nm}$, $V_R=5\text{V}$
		0.9				$\lambda=1550\text{nm}$, $V_R=5\text{V}$
Dark current	I_D			400	pA	$V_R=5\text{V}$
Total capacitance	C			5	pF	$V_R=5\text{V}$, $f=1\text{MHz}$

3) KPDE030-S

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active diameter	D	300			μm	
Bandwidth	BW		0.6		GHz	$R_L=50\Omega$, $P_i=-10\text{dBm}$, $V_R=5\text{V}$
Responsivity	R	0.8			A/W	$\lambda=1310\text{nm}$, $V_R=5\text{V}$
		0.9				$\lambda=1550\text{nm}$, $V_R=5\text{V}$
Dark current	I_D			600	pA	$V_R=5\text{V}$
Total capacitance	C			6	pF	$V_R=5\text{V}$, $f=1\text{MHz}$