

InGaAs Photodiodes

KPDE150-H45

Characteristics

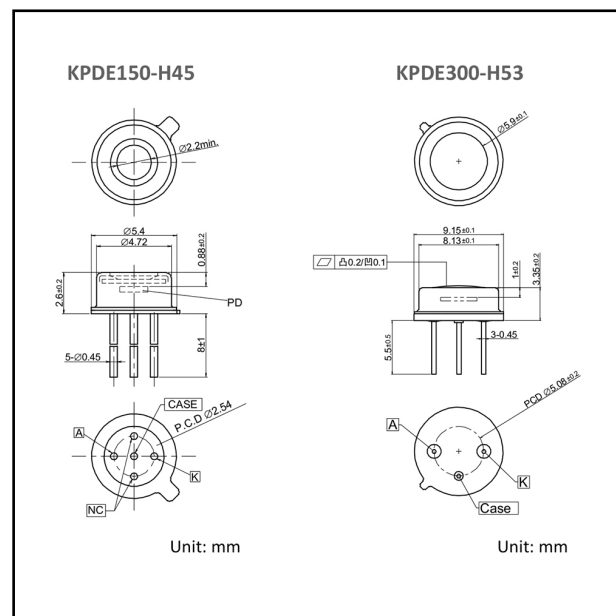
- Large sensitive area
- Low voltage operation
- Custom designed photodiode available

Applications

- Laser power monitors
- Laser diode and LED aging equipment
- Near infrared sensing system
- Power meters

Package

- TO-CAN



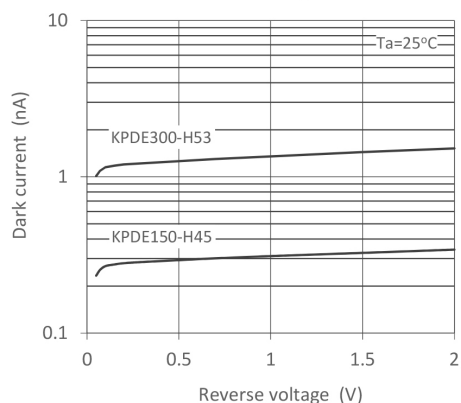
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	2	V	-
			null	
Reverse Current	I_R	50	mA	-
			null	
Forward current	I_F	50	mA	-
			null	
Operating temperature	T_{opr}	-20 to +70		Avoid dew condensation
Storage temperature	T_{stg}	-20 to +80		Avoid dew condensation

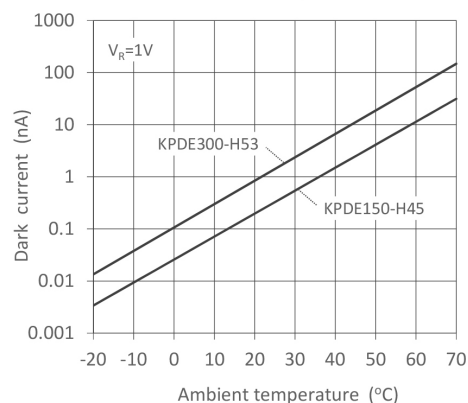
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	1500	-	μm	-
					null	
Sensitive wavelength		900	-	1700	nm	-
					null	
Responsivity	R	0.8 0.9	0.9 1.0	-	A/W	$V_R=1\text{V}$ =1310nm
					null	$V_R=1\text{V}$ =1550nm
Dark current	I_D	-	1	-	nA	$V_R=1\text{V}$
					null	
Total capacitance	C_t	-	150	-	pF	$V_R=1\text{V}$ f=1MHz

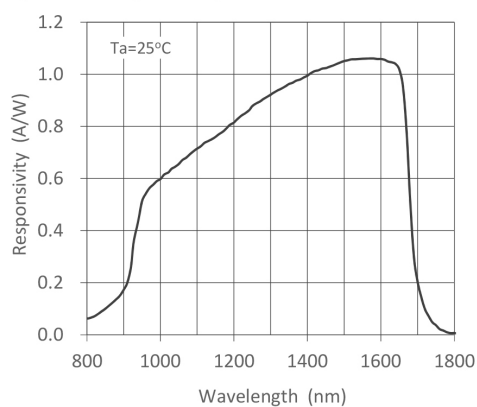
Dark Current - Reverse Voltage



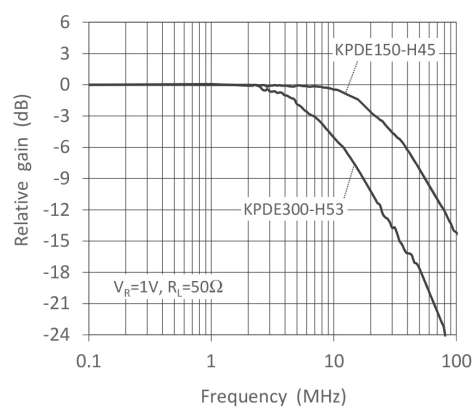
Dark Current - Ambient Temperature



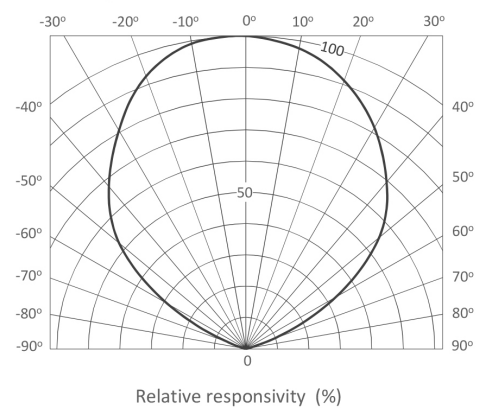
Spectral Responsivity



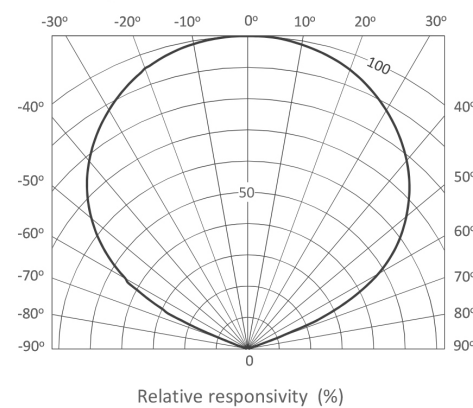
Frequency Response



KPDE150-H45
Directivity



KPDE300-H53
Directivity



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