

InGaAs Photodiodes

KPDE300-H53

Characteristics

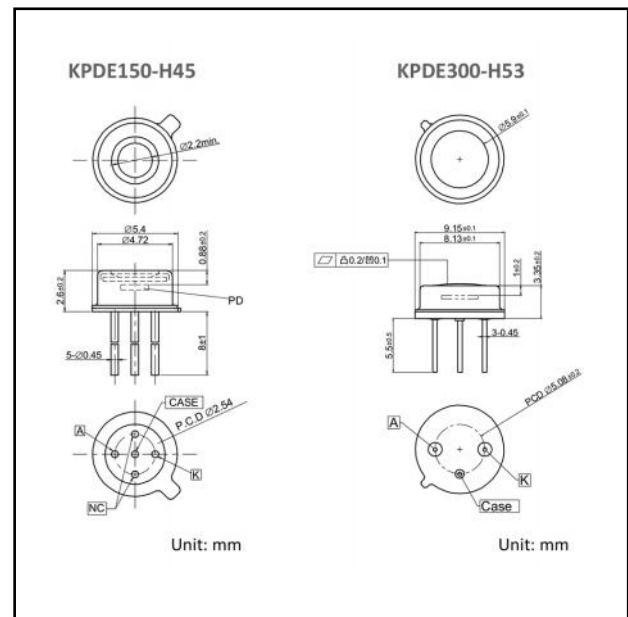
- Large sensitive area
- Low voltage operation
- Custom designed photodiode available

Applications

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

Package

- TO-CAN



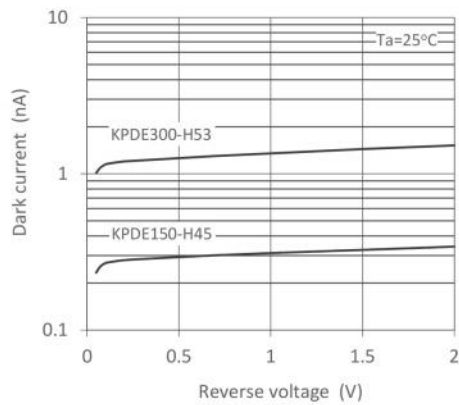
Absolute Maximum Ratings

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

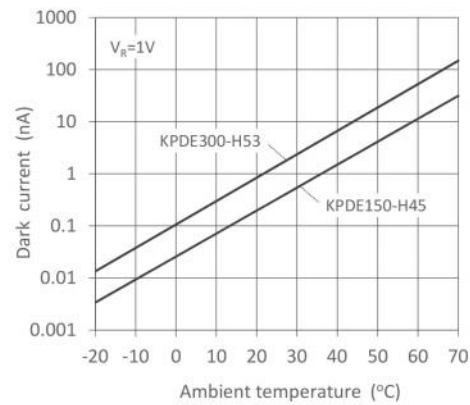
Electrical and Optical characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	3000	-	μm	-
Sensitive wavelength	λ	900	-	1700	nm	-
Responsivity	R	0.8 0.9	0.9 1.0	-	A/W	$V_R=1V \lambda=1310nm$ $V_R=1V \lambda=1550nm$
Dark current	I_D	-	2	-	nA	$V_R=1V$
Total capacitance	C_t	-	1	-	mV	$V_R=1V f=1MHz$

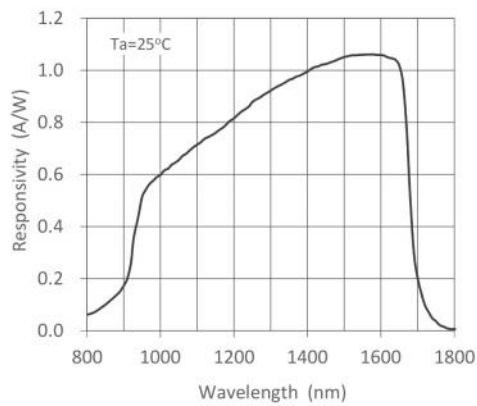
Dark Current - Reverse Voltage



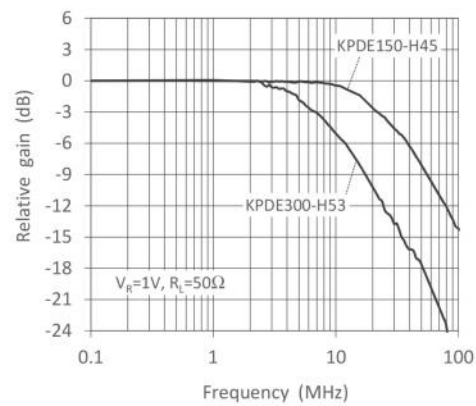
Dark Current - Ambient Temperature



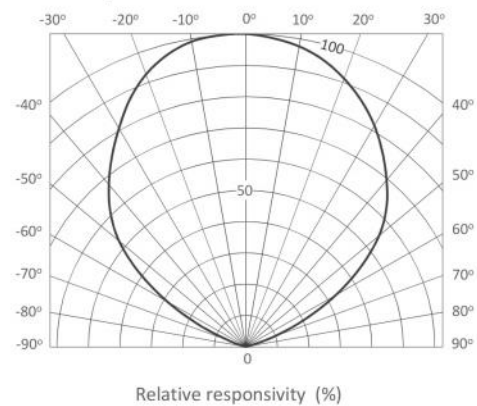
Spectral Responsivity



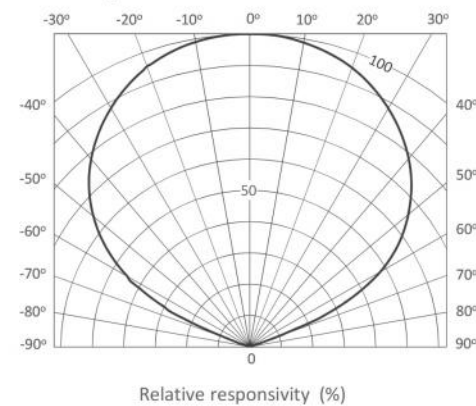
Frequency Response



KPDE150-H45 Directivity



KPDE300-H53 Directivity



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