

InGaAs Photodiodes KPDE150-H45

Characteristics

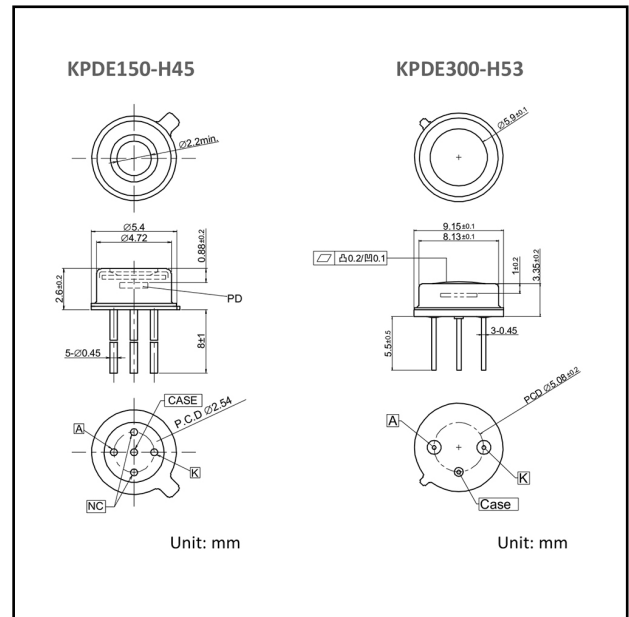
- Large sensitive area
- Low voltage operation
- Custom designed photodiode available

Applications

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

Package

- TO-CAN



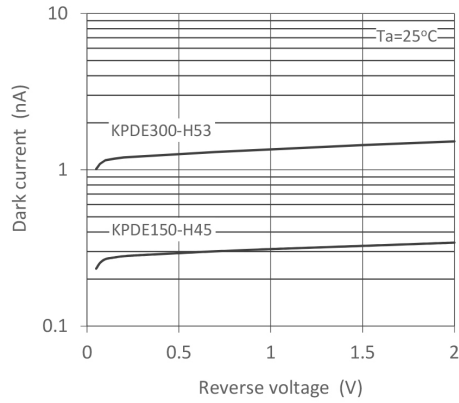
Absolute Maximum Ratings

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

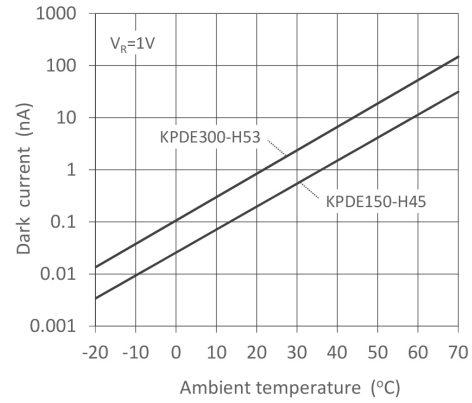
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

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

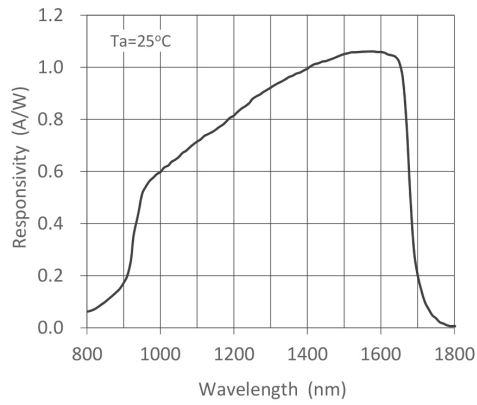
Dark Current - Reverse Voltage



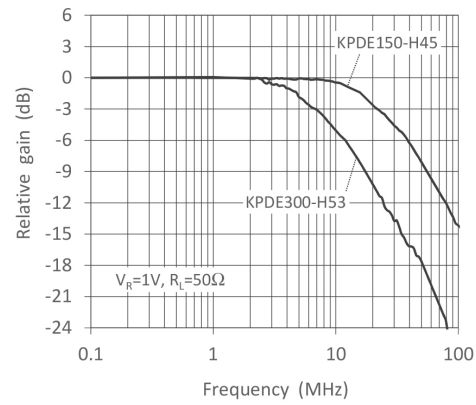
Dark Current - Ambient Temperature



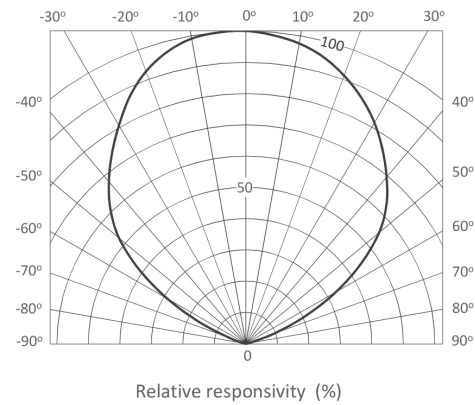
Spectral Responsivity



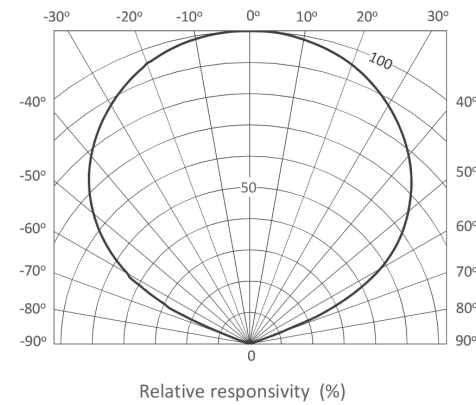
Frequency Response



KPDE150-H45 Directivity



KPDE300-H53 Directivity



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KYOTO SEMICONDUCTOR Co.,Ltd.

Kyoto Headquarter Kansai Sales Office

307-21, Nishiote-cho, Fushimi-ku, Kyoto, 612-8362, Japan
TEL:+81 75-605-7314(Kansai Sales Office) FAX:+81 75-605-7312

Tokyo Headquarter Tokyo Sales Office

24th Sky Building 2nd and 4th Floor, 1-34-3, Shinjuku Shinjuku-ku, Tokyo, 160-0022, Japan
TEL:+81 3-5312-5360(Tokyo Sales Office) FAX:+81 3-5312-5367

Kyosemi Opto America Corporation

4655, Old Ironsides Suite, 230, Santa Clara, California, 95054, USA
TEL: +1 408-492-9361 FAX: +1 408-492-9843