

GaAs Photodiodes KPDG020C

Characteristics

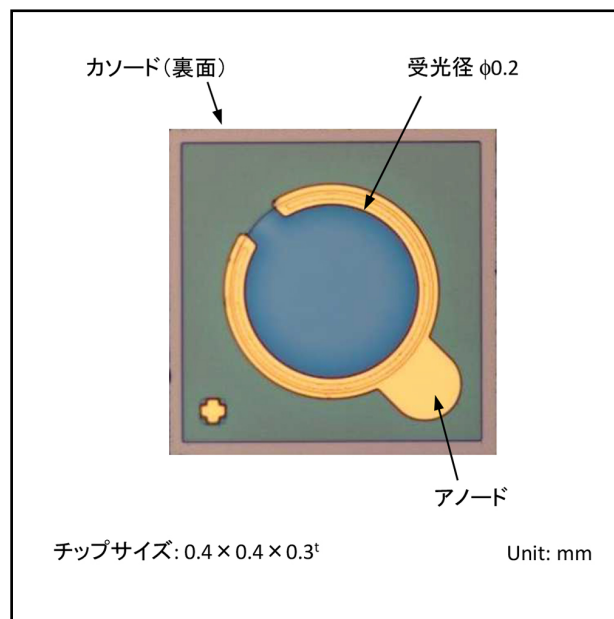
- Large detectable area
- Low dark current
- High speed

Applications

- Optical interconnection

Package

- CHIP



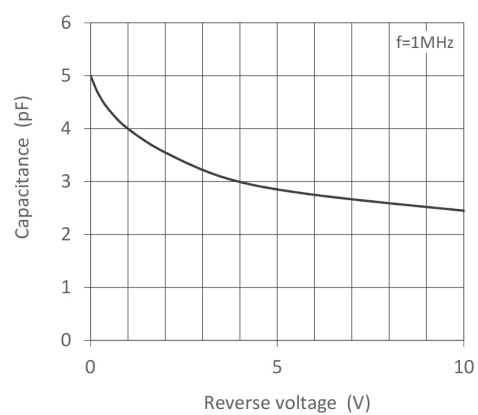
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	20	V	-
Maximum optical power input	P_{imax}	20	mW	-
Forward current	I_F	10	mA	-
Operating temperature	T_{opr}	-40 to +85		Avoid dew condensation
Storage temperature	T_{stg}	-50 to +125		Avoid dew condensation

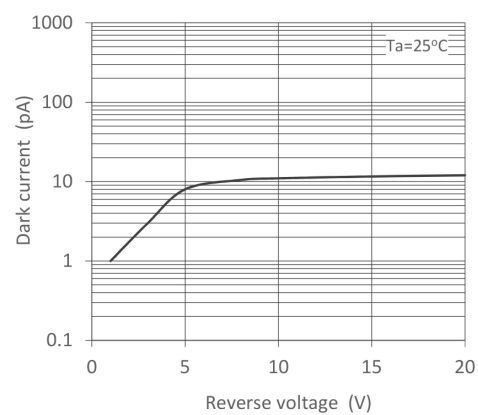
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	200	-	μm	-
Sensitive wavelength		650	-	880	nm	-
Bandwidth	BW	-	1	-	GHz	$V_R=2V$ $R_L=50$
Responsivity	R	-	0.6	-	A/W	$V_R=2V$ $\lambda=850\text{nm}$
Dark current	I_D	-	2.5	-	pA	$V_R=2V$
Total capacitance	C_t	-	3.5	-	pF	$V_R=2V$ $f=1\text{MHz}$

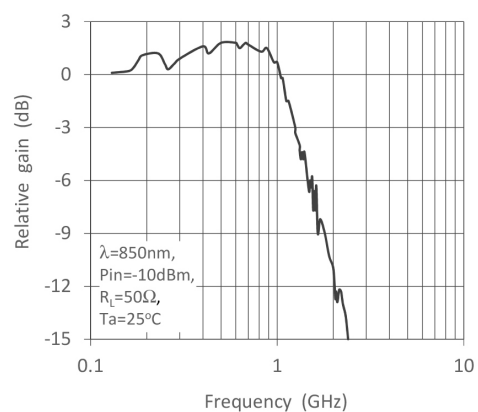
Capacitance - Reverse Voltage



Dark Current - Reverse Voltage



Frequency Response



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