

Edge Illuminated InGaAs Photodiode

Features

- Edge illuminated type for surface hybrid integration
- Large aperture (100 x 120 μm)
- Low dark current
- High reliability

Description

KPEIMC-UDCOM has a photo sensitive area on the chip edge facet. This is attractive for surface hybrid integration on V-grooved silicon or planar light-wave circuit (PLC) platform

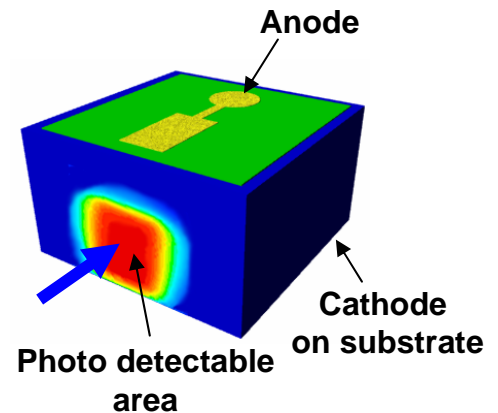
Application

- Laser back light power monitor
- Optical interconnection
- FTTH digital optical communication

Specifications

Maximum Ratings

Item	Symbol	Value	Unit
Reverse voltage	V_R	20	V
Maximum optical input	P_{max}	10	mW
Forward current	I_F	10	mA
Operating ambient temperature	T_{op}	-40 to +85	degC
Storage temperature	T_{stg}	-50 to +85	degC



Electrial and Optical Characteristics ($V_R=5V$, $T_a=25$ deg C unless otherwise noted)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Dark current	I_d	--	--	50	300	pA
Capacitance	C	f = 1 MHz	--	2	5	pF
Responsivity	R	$\lambda=1310$ nm, Pin=-10 dBm	0.6	0.7	--	A/W
		$\lambda=1550$ nm, Pin=-10 dBm	0.7	0.75	--	
Bandwidth	BW	$\lambda=1550$ nm, Pin=-10 dBm	0.8	1.5	--	GHz

Die Geometry

Parameter	Specification	Tolerance	unit
Chip size	450 x 450	+/- 25	μm
Chip height	250	+/- 20	
Detectable area	100 x 120	+/- 10	

Kyosemi Corporation

Specifications are subject to change without notice.

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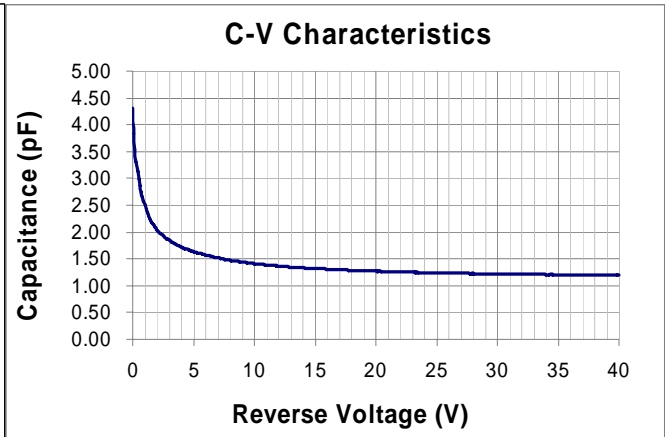
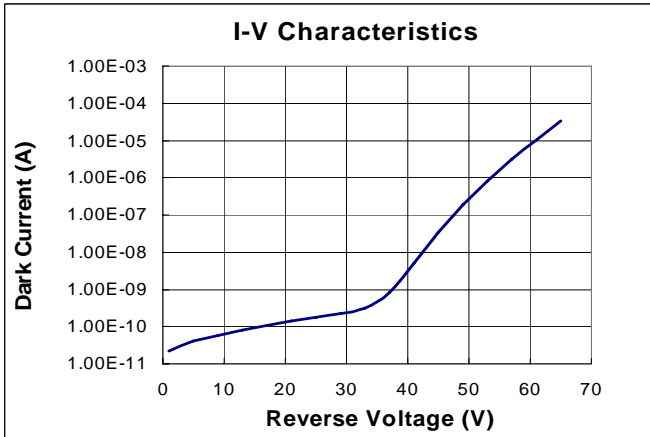
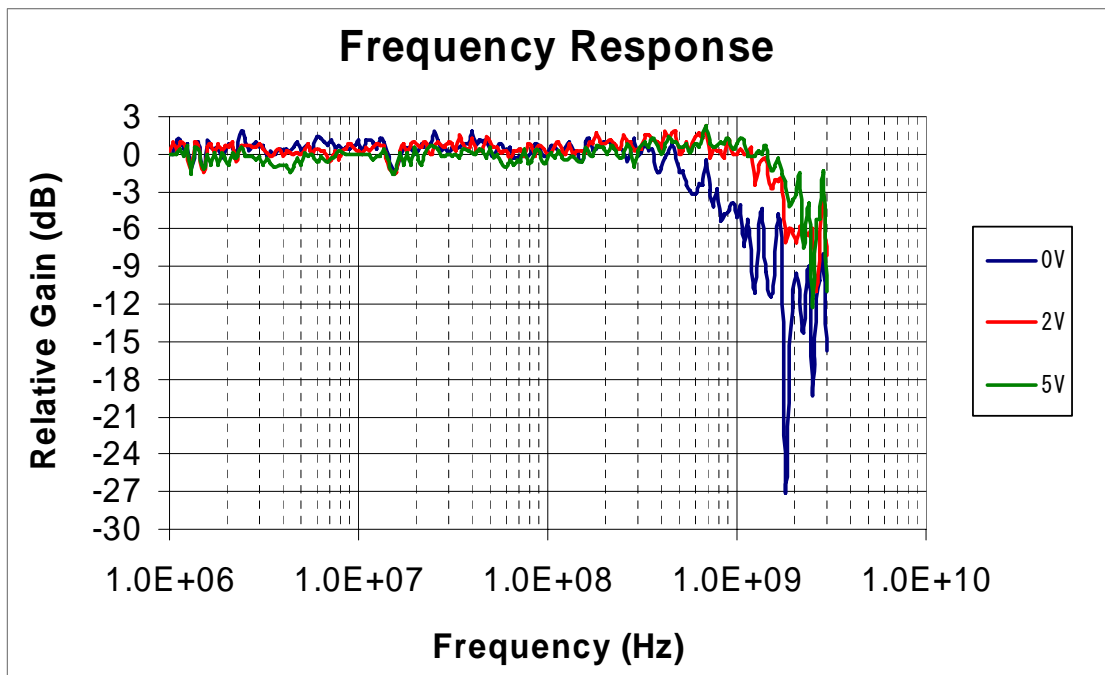
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(Ta=25°C)

(Ta=25°C, f=1MHz)


 (Ta=25°C, $\lambda = 1550$ nm, $R_L = 50 \Omega$, $P_{in} = -10$ dBm)

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