

TPD-1A12-050

10Gbps InGaAs Avalanche Photodiode Chip on Carrier (CoC)

FEATURES:

- Backside illuminated APD
- Optimized for fiber optic application
- High responsivity at 1310 nm/1550 nm
- High sensitivity application
- Data rate up to 10Gbps

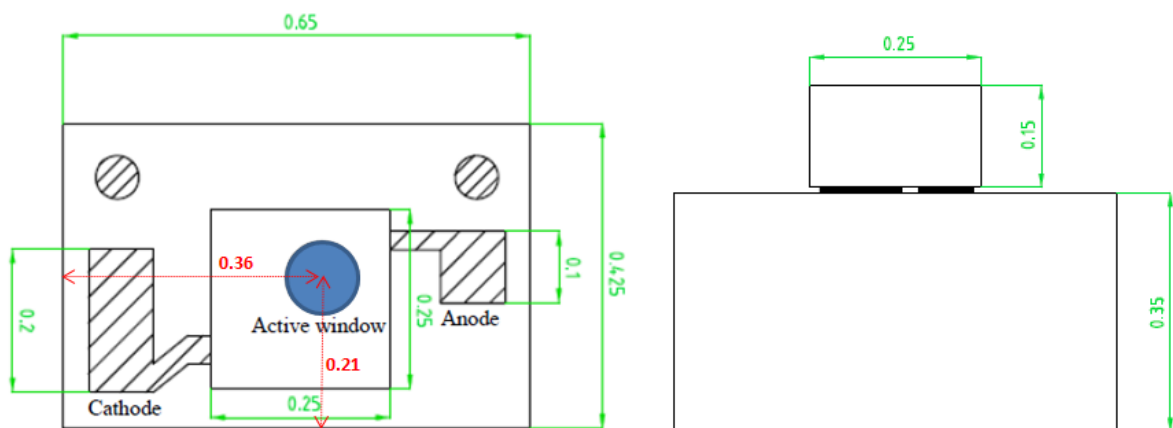
ELECTRO-OPTICAL CHARACTERISTICS(25°C):

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Active Diameter	Φ		55		μm	
Responsivity	R	0.85	1		A/W	M=1, $\lambda=1550\text{nm}$
		0.75	0.9			M=1, $\lambda=1310\text{nm}$
Breakdown Voltage	V_{BD}	30	36	42	V	$I_{\text{R}}=10\mu\text{A}$
V_{BD} temperature coefficient	$\Delta V_{\text{BD}}/\Delta T$		0.03		V/°C	
APD gain	Gain	6	9			$V_{\text{BD}}=3\text{V}$, $P_{\text{O}}=1\text{uW}$, $\lambda=1550\text{nm}$
Capacitance	C		0.2		pF	$V_{\text{BD}}=3\text{V}$, $f=1\text{ MHz}$
Bandwidth	BW		7.5		GHz	$V_{\text{BD}}=3\text{V}$, $\lambda=1550\text{nm}$

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Reverse Current		2	mA	
Forward Current		10	mA	

OUTLINE DIAGRAM:



(Unit: mm)

TrueLight reserves the right to make changes due to the improvement of process and package technology.



Rev3.00