

InGaAs APD

Model: OPR080-IGA-APD

Applications

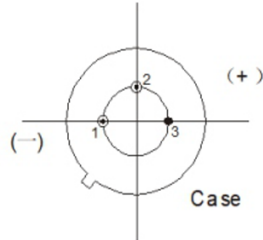
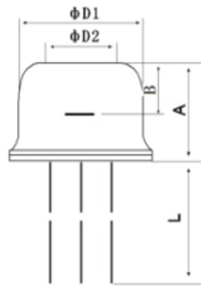
- Distance measurement
- Spatial light transmission
- OTDR
- Low-light-level detection



Electrical Characteristics ($T_C=22 \pm 3^\circ\text{C}$)

Parameter	Symbol	Value			Unit	Test conditions
		Min.	Typ.	Max.		
Response Spectrum	λ	950~1700			nm	
Active Diameter	D		80		μm	
Responsivity	R_e	0.90		1.05	A/W	$\lambda=1550\text{nm}$, $P_{in}=1\mu\text{W}$, $M=1$
Multiplication factor	M	10				$\lambda=1550\text{nm}$, $P_{in}=1\mu\text{W}$, $V_R=V_{BR}-2V$
Dark Current	I_D		16	50	nA	$P_{in}=0\mu\text{W}$, $V_R=V_{BR}-2V$
-3dB cut-off frequency	BW	2.5			GHz	$M=10$, $R_L=50\Omega$
Reverse Breakdown Voltage	V_{BR}	40		50	V	$I_R=10\mu\text{A}$, $P_{in}=0\mu\text{W}$
Capacitance	C		0.38	0.50	pF	$V_R=V_{BR}-2V$, $f=1\text{MHz}$
Temperature coefficient of V_{BR}	Y	0.03	0.08	0.13	V/ $^\circ\text{C}$	$I_R=10\mu\text{A}$, $P_{in}=0\mu\text{W}$ -55 $^\circ\text{C}$ ~ +85 $^\circ\text{C}$

Package Drawings



	CTAPD80V1
PIN1	Cathode
PIN2	Gnd
PIN3	Anode

Symbol	Min	Typ	Max	Units
$\phi D1$	4.65	4.70	4.80	mm
A	3.15	3.25	3.4	mm
B	1.47	1.5	1.53	mm
L	13.5	15.0	18	mm

Type Responsivity

