



FEATURES

- 500 μm Circular Active Area
- Fast Response
- Low Capacitance
- Hermetically Sealed Package
- Low Noise
- High Gain

APPLICATIONS

- Target Designators and Laser Spot Trackers
- Remote Sensing and LiDAR
- Industrial Laser Instrumentation
- Spaceborne LiDAR
- Optical Communication at 1064nm
- Scientific Pulsed Laser Detection

Electro-Optical Characteristics at 25 °C

Parameters	Test Conditions	Min	Typ.	Max	Units
Active Area	$\Phi 0.5 \text{ mm}$		0.031		mm^2
Spectrum Response	-	400nm - 1100nm			
Responsivity	$\lambda = 1064\text{nm}, M = 1$	0.3	0.36	-	A/W
V_{OP} (Gain = M)	$\lambda = 1064\text{nm}, M = 100$	332	-	437	V
Dark Current, I_d	$M = 100$	-	5.0	12.0	nA
Response Time t_s	$f = 1 \text{ MHz}, R_L = 50\Omega,$ $\lambda = 1064\text{nm}$	-	2.0	-	ns
Capacitance, C	$M = 100, f = 1\text{MHz}$	-	2.5	4.0	pF
Reverse Breakdown Voltage, V_{BR}	$I_R = 10\mu\text{A}$	350	-	460	V
Temperature Coefficient	$I_R = 10\mu\text{A}, -40^\circ\text{C} \sim 85^\circ\text{C}$	-	2.4	3.0	$\text{V}/^\circ\text{C}$
Package	-	TO - 46			-

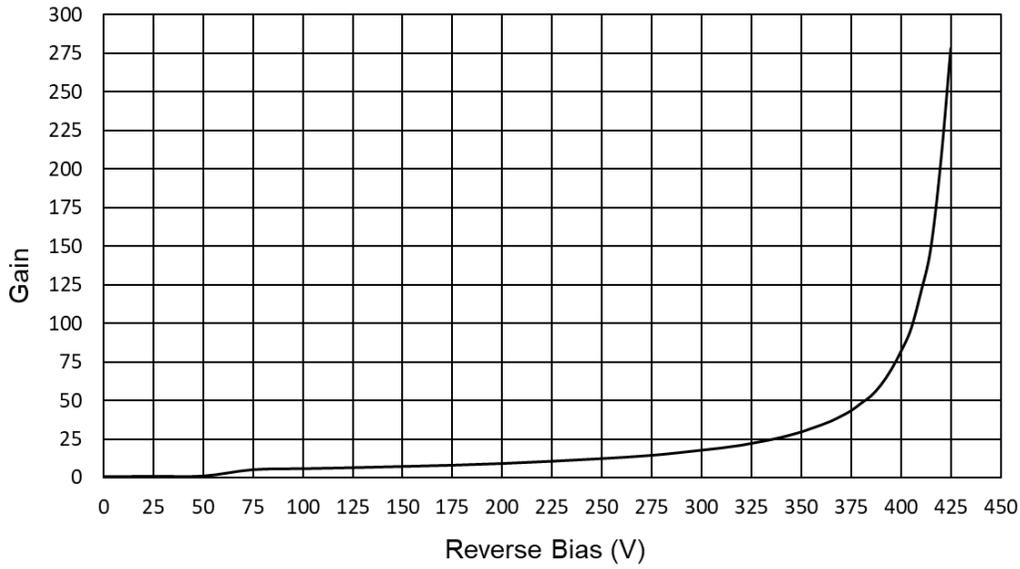
Thermal Parameters

PARAMETER	MIN	MAX	Units
APD Supply Voltage	-	$0.95 \cdot V_{BR}$	V
Operating Temperature	-45	+85	$^\circ\text{C}$
Storage Temperature	-45	+100	$^\circ\text{C}$
Forward Current, I_F	-	5	mA
Lead Soldering Temperature ¹	-	260	$^\circ\text{C}$

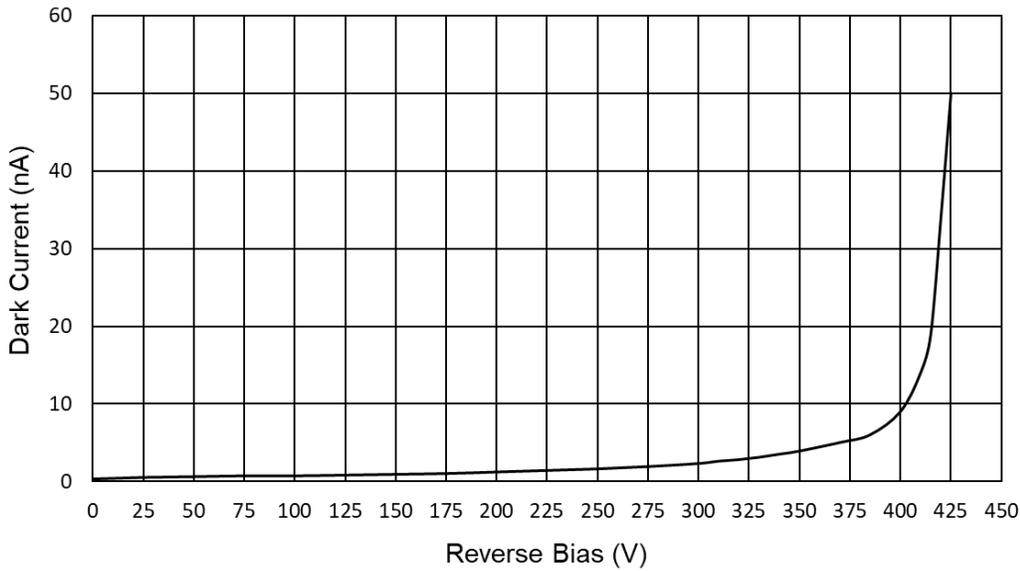
¹0.080" from case for 10 seconds.



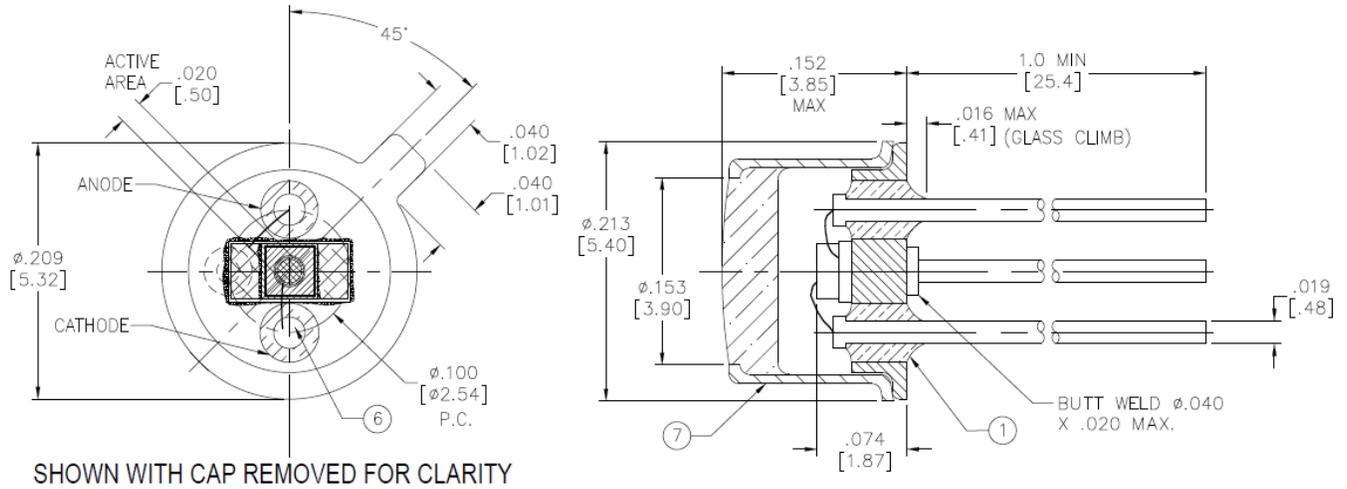
Typical Gain vs. Reverse Bias



Typical Dark Current vs. Reverse Bias



Package Information



Dimensions are in inch [metric] units.

Specifications are subject to change without prior notice.