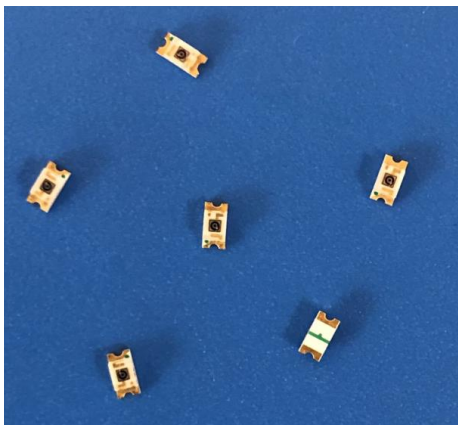


Silicon avalanched photodiode



Description

Circular active area APD chip with 200um diameter.
Clear 3216 SMD package with very compact design.

Features

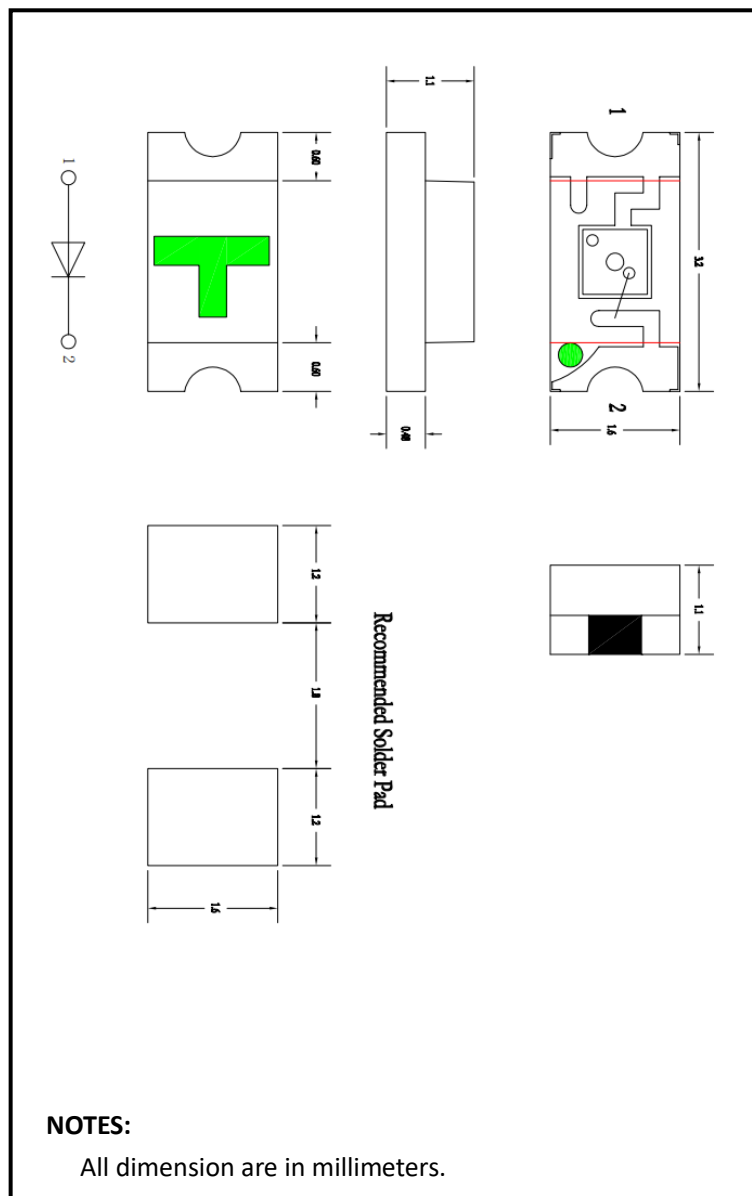
- * Top illumination planar APD
- * $\Phi 200\mu\text{m}$ active area
- * High gain at low bias voltage
- * Operating temperature is from -40 to $+80^\circ\text{C}$

Applications

- * Laser range finder
- * High speed optical communications

Absolute Values

Operating voltage	$0.95 \times V_{BR}$
Forward current	1mA
Power dissipation	1mW

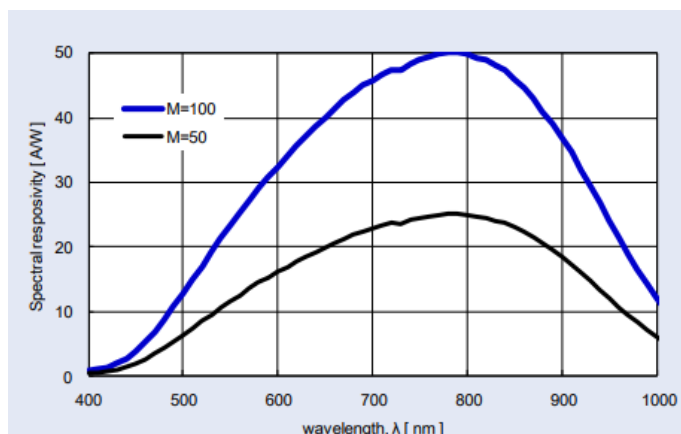


Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission.
Specifications are subject change without notice

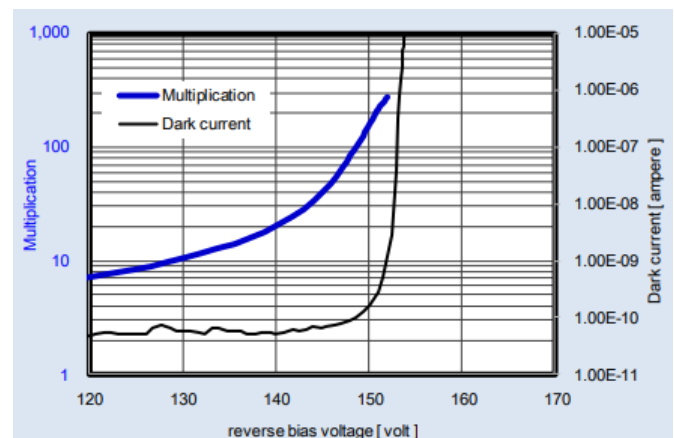
Absolute Maximum Ratings (Ta=25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		400-1100			nm
Peak sensitivity wavelength	λ_p		800			nm
Active diameter	ϕ		200			μm
Effective photosensitive area			0.03			mm^2
Dark current	I_D	M=100	0.02	0.08	0.50	nA
Junction Capacitance	C	M=100, f=1MHz		1.0		PF
Reverse breakdown voltage	V_{BR}	$I_D=10\mu\text{A}$	80		120	V
Operating voltage temperature coefficient	δ	$T_c=-40\sim+85^\circ\text{C}$	0.65			$\text{V}/^\circ\text{C}$
Rise time	t_R	f=1MHz, $\lambda=800\text{nm}$, 50 Ω	-	0.3	-	ns
Photo current gain	M	$U_r=0.95 \cdot U_{br}$		100		
Reponsivity	R_e	$\lambda=800\text{nm}$, $\phi_e=1\mu\text{w}$, M=1		0.5		A/W

■ Responsivity vs. Multiplication



■ Multiplication and Dark current vs. Ubias



■ Capacitance vs. Operating voltage

