



TP516B
Si Avalanche Photodiode
(Under Development)



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1. Description

This is an APD with peak sensitivity wavelength at 700nm.
High magnification is obtained at this band, and high sensitivity is realized.

2. Features

- High sensitivity at 700nm
- Photosensitive area: 0.2mm Φ
- Chip Size: 0.8mm x 0.8mm
- PAD Size: Anode 80um x 80um、Cathode 80um Φ
- ※ Radiation resistance design is not applied to this product.

3. Maximum Ratings

Item	Ratings	Unit
Storage temperature	-40 to 100	°C
Operating temperature	-30 to 85	°C

4. Electrical and Optical Characteristics

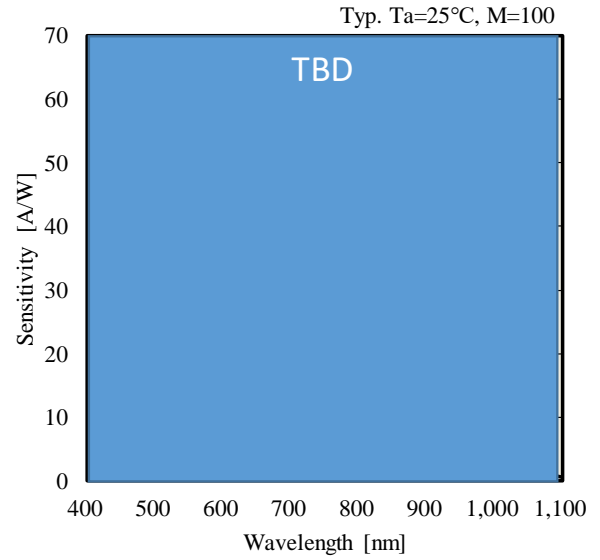
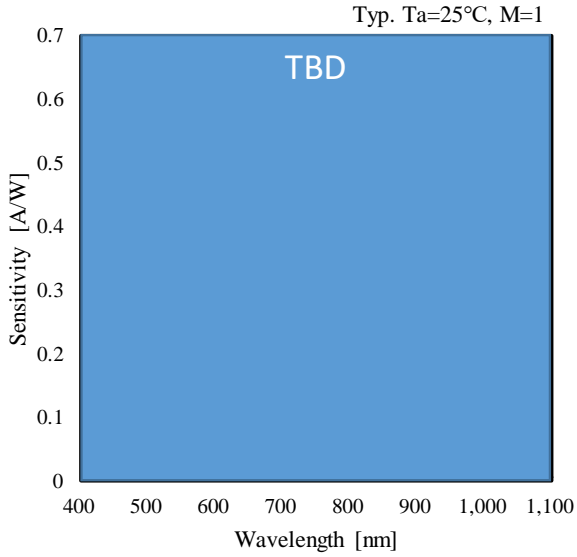
Measurement condition : Ta=25°C

Item	Condition	MIN	TYP	MAX	Unit
Peak sensitivity wavelength	M = 1	-	700	-	nm
Peak sensitivity	M = 100 λ =635nm	-	34.4	-	A/W
Breakdown voltage	ID = 100uA	85	100	115	V
Temperature coefficient of breakdown voltage		-	0.37	-	V/°C
Dark current	M=100 PD Area = 0.2mm Φ	-	0.08	-	nA
Cutoff frequency	RL = 50 Ω -3dB	-	TBD	-	GHz
Inter-terminal capacitance	PD Area = 0.2mm Φ	-	0.64	-	pF
Magnification	λ = 700nm	-	100	-	-

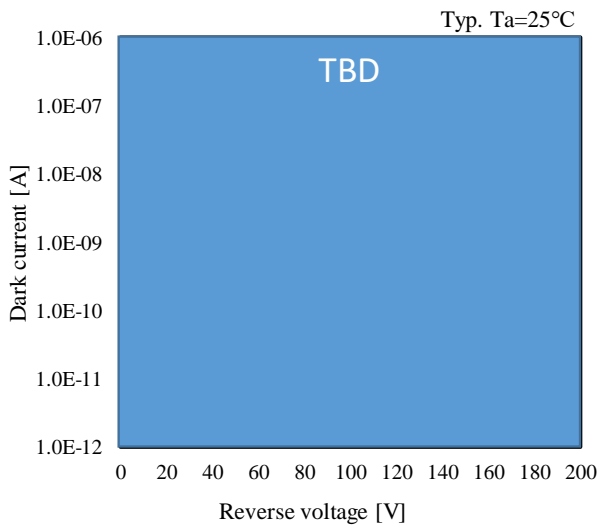
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5. Reference Data

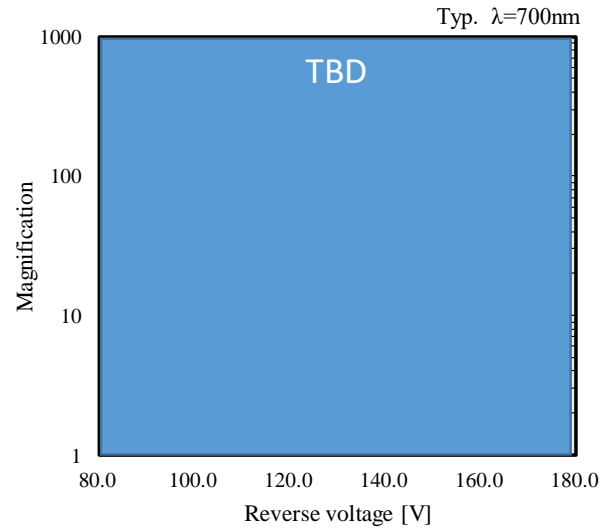
● Spectral Response



● Dark current - Reverse voltage

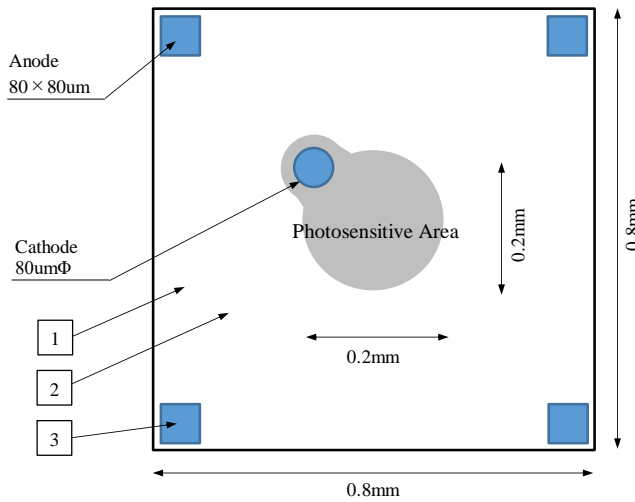


● Magnification - Reverse voltage



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6. Details of Photodiode



※No Metal coating on the back side.

No.	Name	Material
1	Chip	Silicon
2	Passivation	P- SiN
3	Bonding Pad	Al·Cu

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