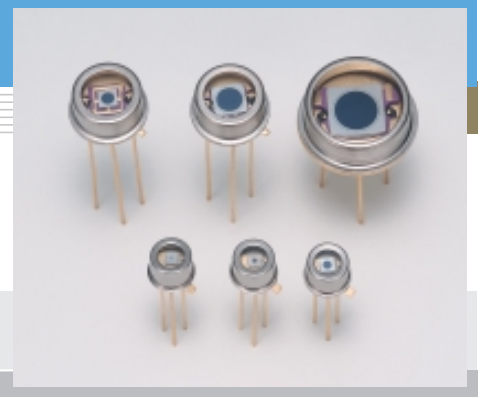


Si APD

S5343 to S5345, S9073 to S9075

Short wavelength type APD



Features

- High sensitivity and low noise in UV to visible range

Applications

- Low-light-level measurement
- Analytical equipment

■ General ratings / Absolute maximum ratings

Type No.	Dimensional outline/ Window material *1	Package	Effective active		Absolute maximum ratings	
			area size (mm)	area (mm ²)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
S9073	①/U	TO-18	φ0.2	0.03	-20 to +60	-55 to +100
S9074			φ0.5	0.19		
S5343			φ1.0	0.78		
S9075	②/U	TO-5	φ1.5	1.77		
S5344			φ3.0	7.0		
S5345			φ5.0	19.6		

■ Electrical and optical characteristics (Typ. T_a=25 °C, unless otherwise noted)

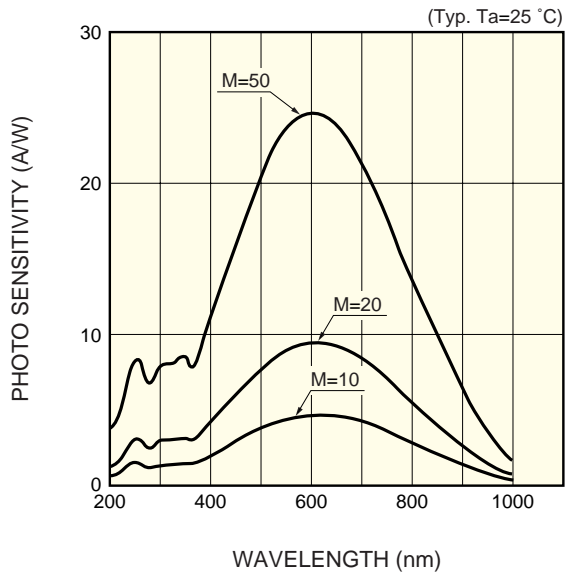
Type No.	Spectral response range λ (nm)	Peak *3 sensitivity wavelength λ _p (nm)	Photo sensitivity S M=1 λ=620 nm (A/W)	Quantum efficiency QE M=1 λ=620 nm (%)	Breakdown voltage V _{BR} I _D =100 μA		Temp. coefficient of V _{BR} (V/°C)	Dark *3 current I _D		Cut-off *3 frequency f _c R _L =50 Ω (MHz)	Terminal *3 capacitance C _t (pF)	Excess *3 noise figure x λ=650 nm	Gain M λ=650 nm		
					Typ. (V)	Max. (V)		Typ. (nA)	Max. (nA)						
S9073	200 to 1000	620	0.42	80	150	200	0.14	0.2	5	900	3	0.28	50		
S9074														400	7
S5343														250	15
S9075														100	30
S5344														25	120
S5345														8	320

*1: U: UV glass

*2: Area in which a typical gain can be obtained.

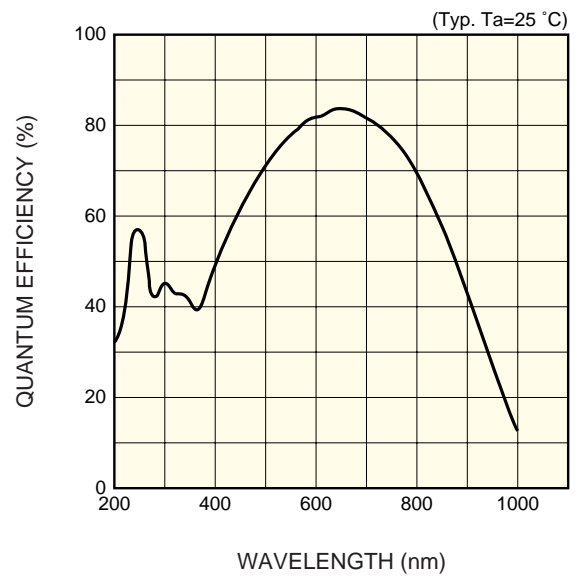
*3: Values measured at a gain listed in the characteristics table.

■ Spectral response



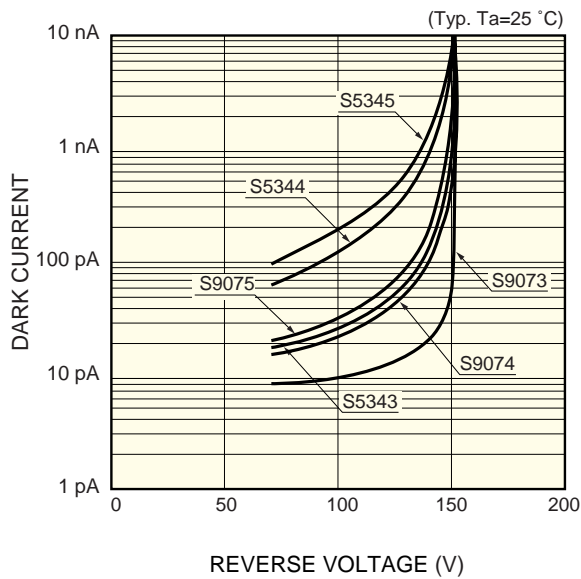
KAPDB0010ED

■ Quantum efficiency vs. wavelength



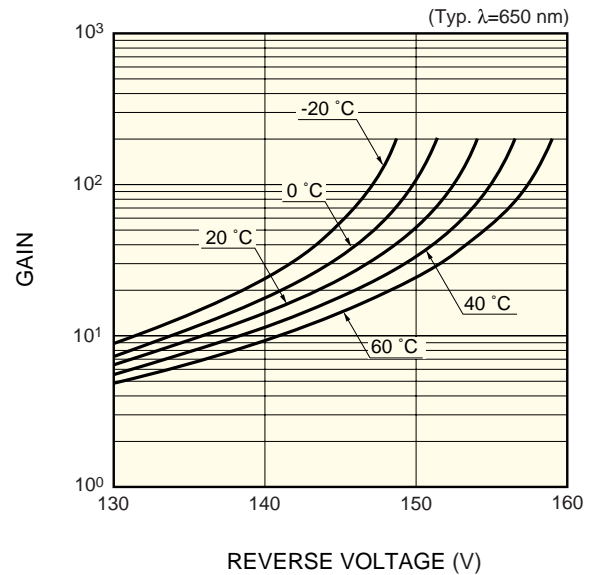
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■ Dark current vs. reverse voltage



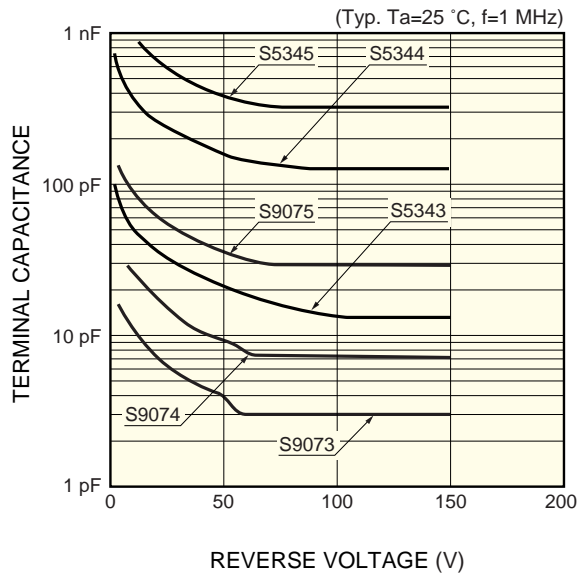
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■ Gain vs. reverse voltage

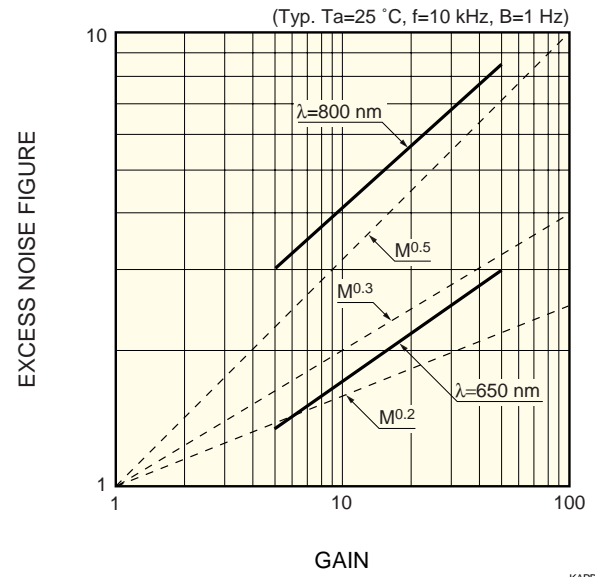


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■ Terminal capacitance vs. reverse voltage

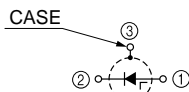
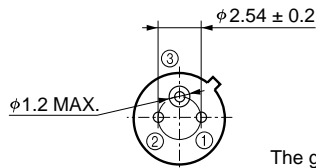
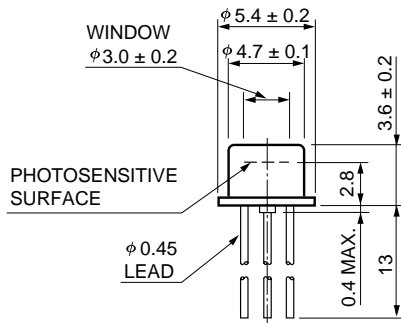


■ Excess noise figure vs. gain



Dimensional outlines (unit: mm)

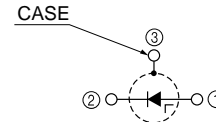
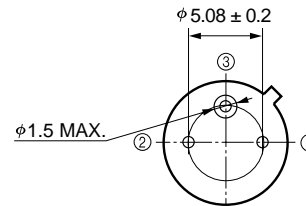
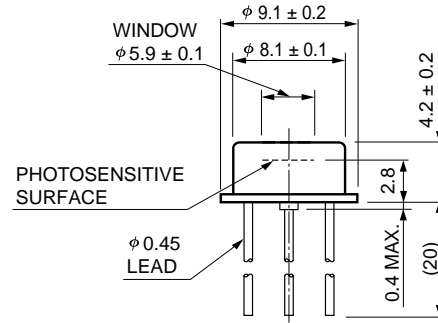
① S9073, S9074, S5343



The glass window may extend a maximum of 0.1 mm beyond the upper surface of the cap.

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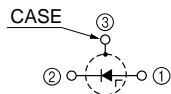
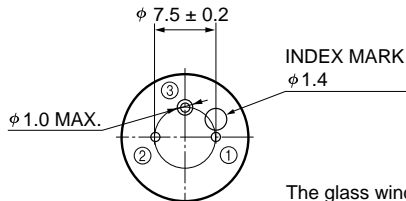
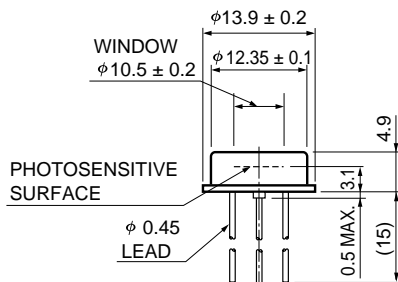
② S9075, S5344



The glass window may extend a maximum of 0.2 mm beyond the upper surface of the cap.

KAPDA0015EA

③ S5345



The glass window may extend a maximum of 0.2 mm beyond the upper surface of the cap.

KAPDA0016EB

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