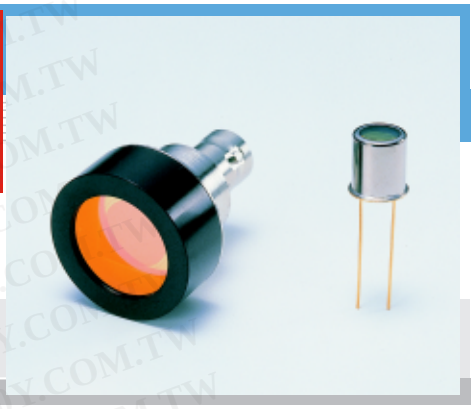
Si photodiode
S9219 series

Spectral response like human eye



Features

- Accurate visible-compensated filter is used
- High reliable metal package
- S9219: Metal package with BNC connector (active area: ϕ11.3 mm)
- S9219-01: TO-5 (active area: 3.6 × 3.6 mm)
- Deviation from standard spectral luminous efficiency V(λ) *1: fs =10 % Typ.

Applications

- Photometry
- Luxmeter, etc.

■ Absolute maximum ratings

Parameter	Symbol	S9219	S9219-01	Unit
Reverse voltage	VR Max.	5	5	V
Operating temperature	Topr	-20 to +50	-40 to +50	°C
Storage temperature	Tstg	-55 to +50	-55 to +50	°C

■ Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	S9219		S9219-01		Unit
			Typ.	Max.	Typ.	Max.	
Spectral response range	λ	*2	380 to 780	-	380 to 780	-	nm
Peak sensitivity wavelength	λp		550	-	550	-	nm
Photo sensitivity	S	λ=λp	0.24	-	0.22	-	A/W
Short circuit current	Isc	100 *lx*, 2856 K	3.8	-	0.5	-	μA
Dark current	ID	VR=10 mV	50	500	10	50	pA
Rise time	tr	VR=0 V, RL=1 kΩ	2.5	-	0.5	-	μs
Terminal capacitance	Ct	VR=0 V, f=10 kHz	1100	-	150	-	pF

*1: Standard spectral luminous efficiency V (λ): wavelength response of the human eye. The extent of deviation from V (λ) is indicated as fs (%).
*2: Conforms to specified range for V (λ)

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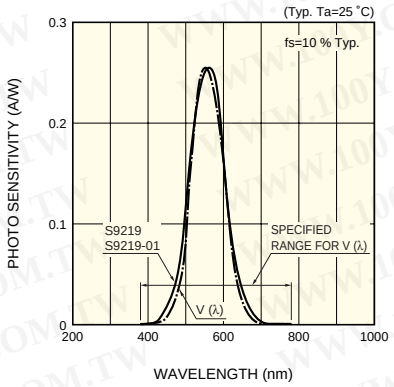
■ Spectral response



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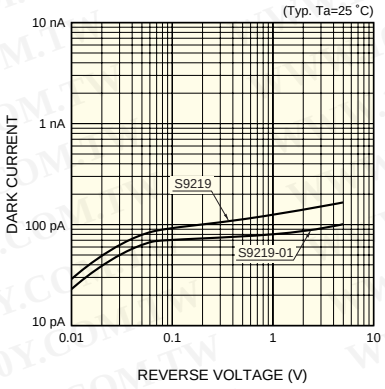
■ Dark current vs. reverse voltage



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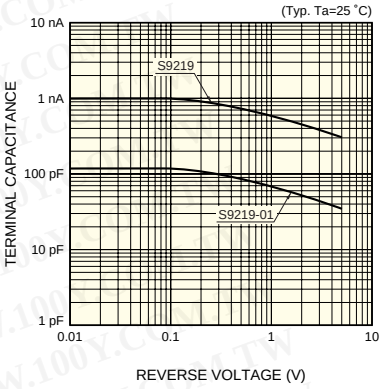
■ Terminal capacitance vs. reverse voltage



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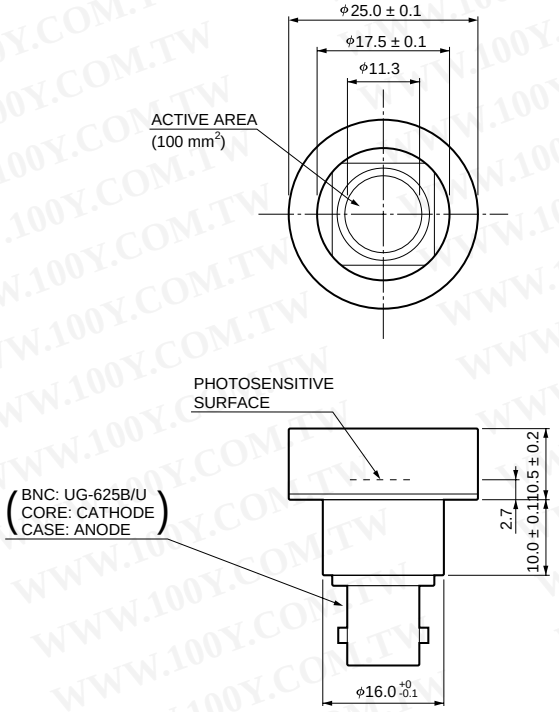
■ Dimensional outlines (unit: mm)

S9219



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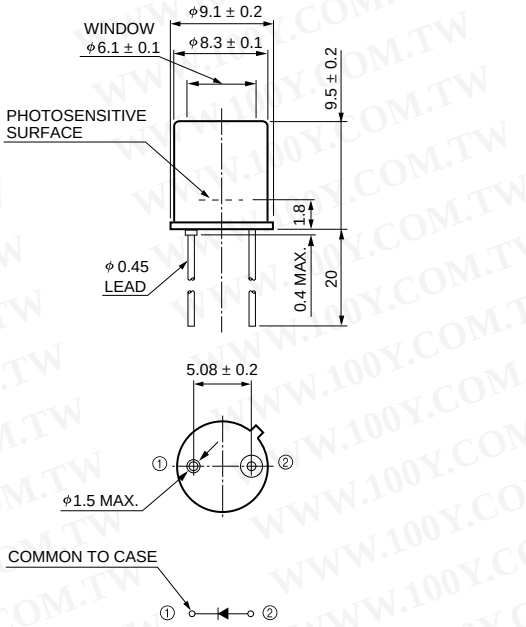
S9219-01



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