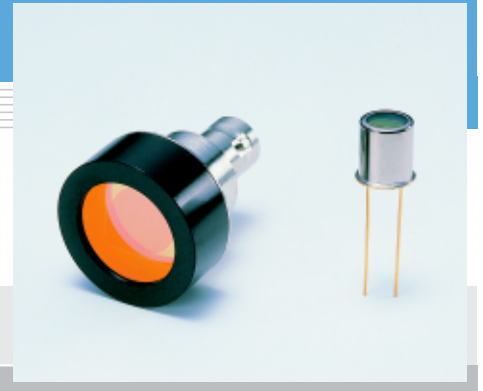


# Si photodiode S9219 series

Spectral response like human eye



## Features

- Accurate visible-compensated filter is used
- High reliable metal package
- S9219: Metal package with BNC connector (active area:  $\phi 11.3$  mm)
- S9219-01: TO-5 (active area:  $3.6 \times 3.6$  mm)
- Deviation from standard spectral luminous efficiency  $V(\lambda)$  \*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

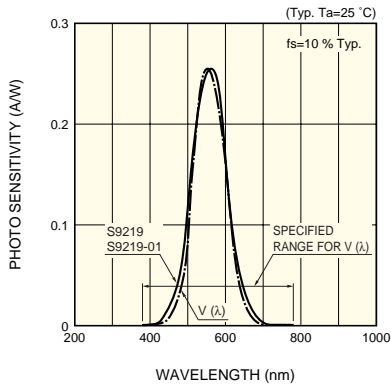
### ■ Electrical and optical characteristics (Ta=25 °C)

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

\*1: Standard spectral luminous efficiency  $V(\lambda)$ : wavelength response of the human eye. The extent of deviation from  $V(\lambda)$  is indicated as fs (%).

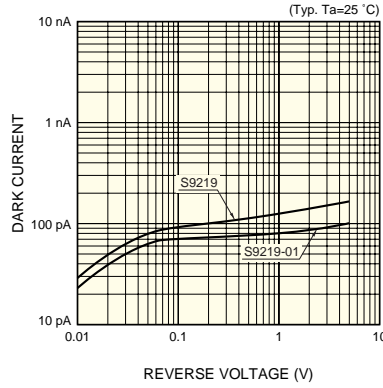
\*2: Conforms to specified range for  $V(\lambda)$

## Spectral response



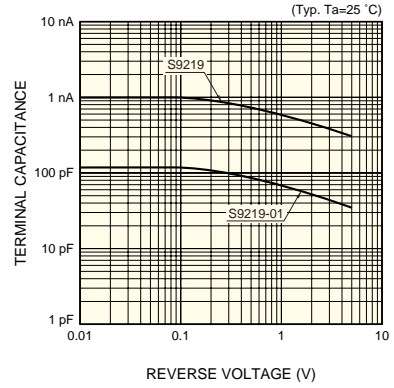
KSPDB0227EC

## Dark current vs. reverse voltage



KSPDB0162EA

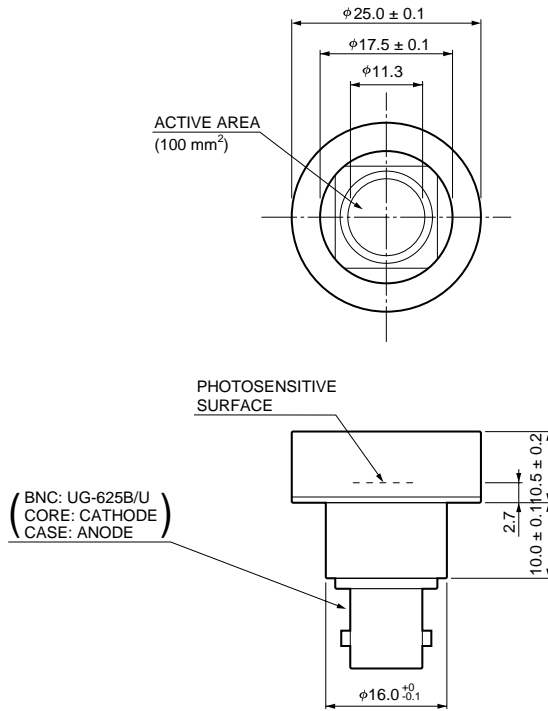
## Terminal capacitance vs. reverse voltage



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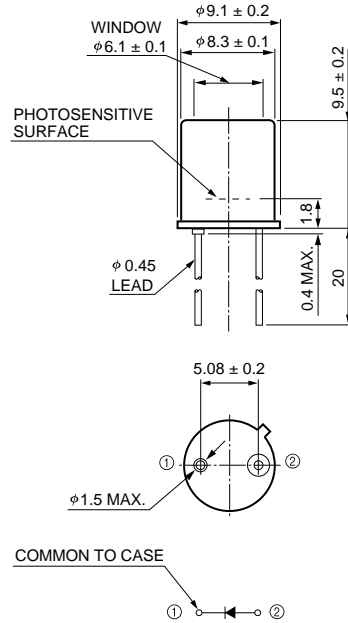
## Dimensional outlines (unit: mm)

S9219



KSPDA0077EA

S9219-01



KSPDA0078EA

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