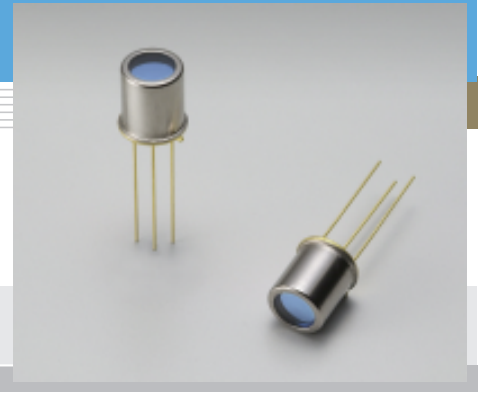


# Si photodiode S2684-254

Photodiode with interference filter for monochromatic light (254 nm) detection



S2684-254 uses an interference filter as its window to provide high sensitivity only to monochromatic light. The spectral response width is as narrow as 10 nm (FWHM), allowing accurate photometry without being adversely influenced by stray light. As the type No. implies, S2684-254 has a peak sensitivity wavelength at 254 nm. However, variant types are also available with different peak sensitivity wavelengths such as 340, 405, 500, 520, 560, 650 and 700 nm.

## Features

- Monochromatic light detection with high sensitivity
- Low dark current

## Applications

- Analytical instruments
- UV monitor (mercury lamp monitor, etc.)

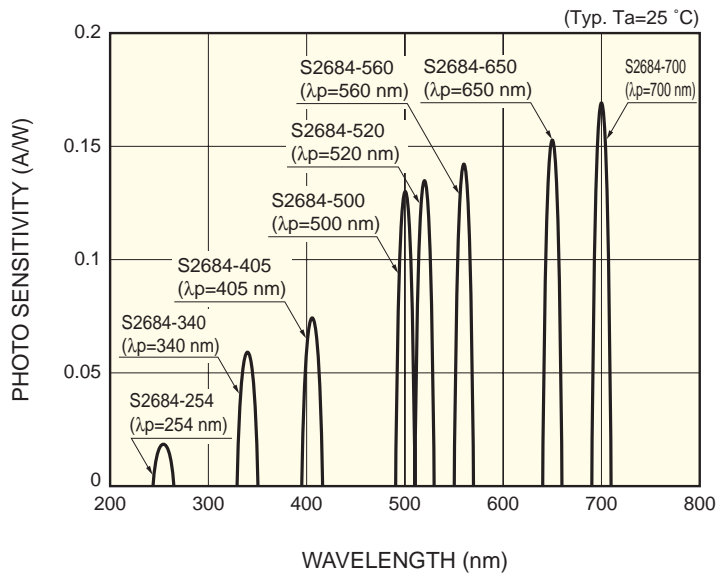
### ■ Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage	VR Max.	5	V
Operating temperature	Topr	-10 to +60	°C
Storage temperature	Tstg	-20 to +70	°C

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak sensitivity wavelength	$\lambda_p$		252	254	256	nm
Spectral response half-width	FWHM		8	10	12	nm
Photo sensitivity	S	$\lambda = \lambda_p$	12	18	-	mA/W
Dark current	Id	VR=10 mV	-	-	25	pA
Temperature coefficient of Id	TcId		-	1.12	-	times/°C
Rise time	tr	VR=0 V, RL=1 kΩ	-	1	-	μs
Terminal capacitance	Ct	VR=0 V, f=10 kHz	-	380	-	pF
Shunt resistance	Rsh	VR=10 mV	0.4	5	-	GΩ
Noise equivalent power	NEP	VR=0 V, $\lambda = \lambda_p$	-	$9.1 \times 10^{-14}$	-	W/Hz <sup>1/2</sup>

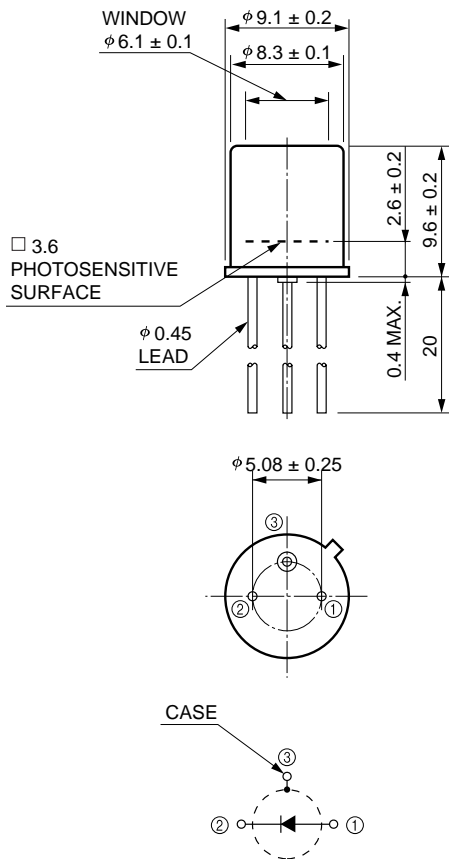
■ Spectral response (S2684-254, etc.)



Note) Made to order other than S2684-254.

KSPDB0135EB

■ Dimensional outline (unit: mm)



KSPDA0081EB

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Type numbers of products listed in the specification sheets or supplied as samples may have a suffix "(X)" which means tentative specifications or a suffix "(Z)" which means developmental specifications. ©2009 Hamamatsu Photonics K.K.

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