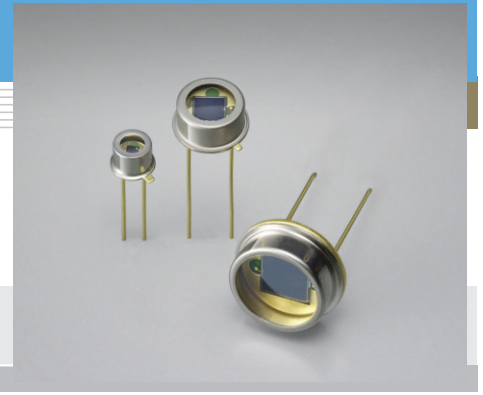


# Si photodiode S1226 series

For UV to visible, precision photometry; suppressed IR sensitivity



## Features

- High UV sensitivity: QE 75 % ( $\lambda=200$  nm)
- Suppressed IR sensitivity
- Low dark current
- High reliability

## Applications

- Analytical equipment
- Optical measurement equipment, etc.

### ■ General ratings / absolute maximum ratings

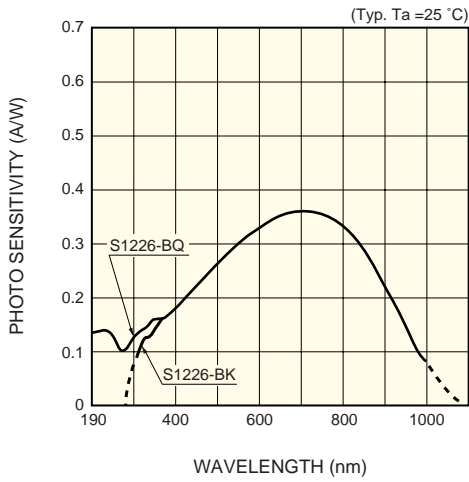
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm <sup>2</sup> )	Absolute maximum ratings				
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)		
S1226-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +80		
S1226-18BK	①/K					-40 to +100	-55 to +125		
S1226-5BQ	②/Q	TO-5	2.4 × 2.4	5.7		-20 to +60	-55 to +80		
S1226-5BK	②/K					-40 to +100	-55 to +125		
S1226-44BQ	②/Q					3.6 × 3.6	13	-20 to +60	-55 to +80
S1226-44BK	②/K							-40 to +100	-55 to +125
S1226-8BQ	③/Q	TO-8	5.8 × 5.8	33		-20 to +60	-55 to +80		
S1226-8BK	③/K					-40 to +100	-55 to +125		

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

Type No.	Spectral response range $\lambda$ (nm)	Peak sensitivity wavelength $\lambda_p$ (nm)	Photo sensitivity S (A/W)			Short circuit current Isc 100 lx		Dark current Id VR=10 mV Max. (pA)	Temp. coefficient of Id TCID (times/°C)	Rise time tr VR=0 V RL=1 kΩ (μs)	Terminal capacitance Ct VR=0 V f=10 kHz (pF)	Shunt resistance Rsh VR=10 mV		NEP (W/Hz <sup>1/2</sup> )											
			$\lambda_p$	200 nm		He-Ne laser 633 nm	Min. (μA)					Typ. (μA)	Min. (GΩ)		Typ. (GΩ)										
				Min.	Typ.																				
S1226-18BQ	190 to 1000	720	0.36	0.10	0.12	0.34	0.5	0.66	2	1.12	0.15	35	5	50	1.6 × 10 <sup>-15</sup>										
S1226-18BK	320 to 1000															-	-								
S1226-5BQ	190 to 1000															0.10	0.12	2.2	2.9	5	0.5	160	2	20	2.5 × 10 <sup>-15</sup>
S1226-5BK	320 to 1000															-	-	4.4	5.9	10	1	380	1	10	3.6 × 10 <sup>-15</sup>
S1226-44BQ	190 to 1000															0.10	0.12	12	16	20	2	950	0.5	5	5.0 × 10 <sup>-15</sup>
S1226-44BK	320 to 1000															-	-	-	-	-	-	-	-	-	-
S1226-8BQ	190 to 1000															0.10	0.12	-	-	-	-	-	-	-	-
S1226-8BK	320 to 1000															-	-	-	-	-	-	-	-	-	-

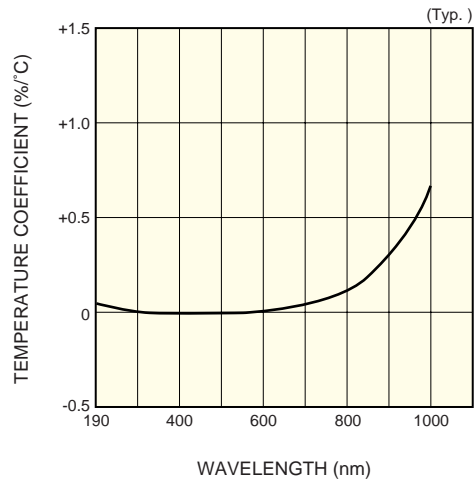
\* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



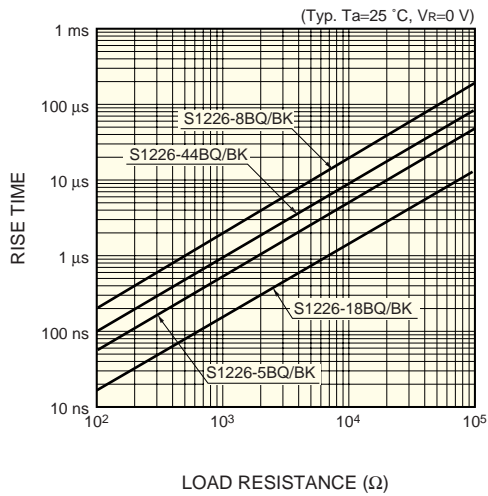
KSPDB0106EA

■ Photo sensitivity temperature characteristic



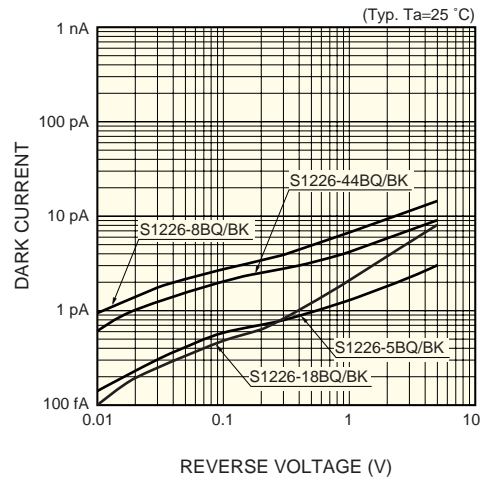
KSPDB0030EA

■ Rise time vs. load resistance



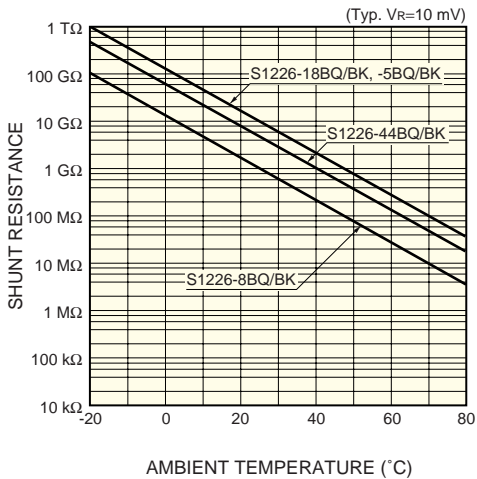
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■ Dark current vs. reverse voltage



KSPDB0108EC

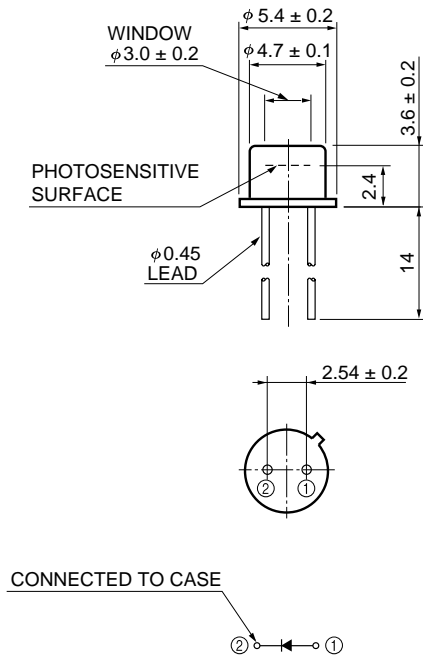
■ Shunt resistance vs. ambient temperature



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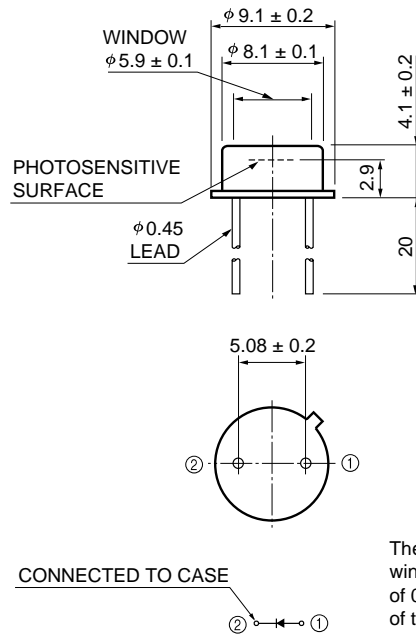
## Dimensional outlines (unit: mm)

### ① S1226-18BQ/-18BK



KSPDA0113EB

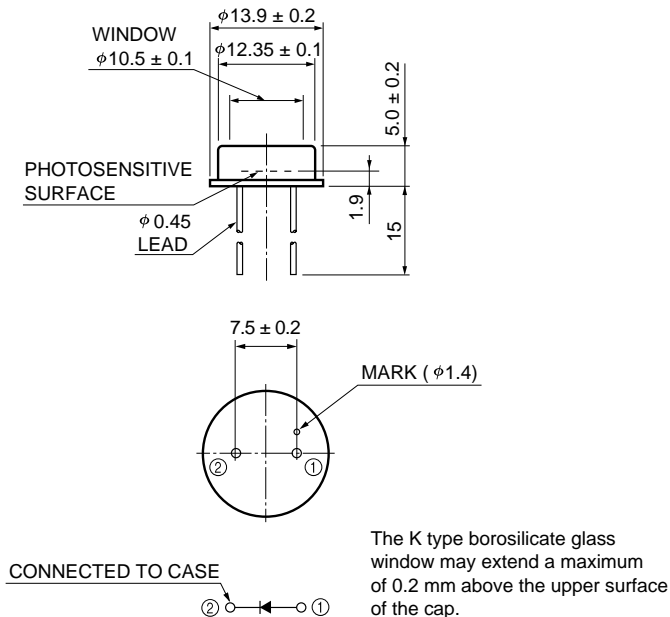
### ② S1226-5BQ/K, S1226-44BQ/K



KSPDA0114EA

The K type borosilicate glass window may extend a maximum of 0.2 mm above the upper surface of the cap.

### ③ S1226-8BQ/-8BK



KSPDA0115EA

The K type borosilicate glass window may extend a maximum of 0.2 mm above the upper surface of the cap.

# HAMAMATSU

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