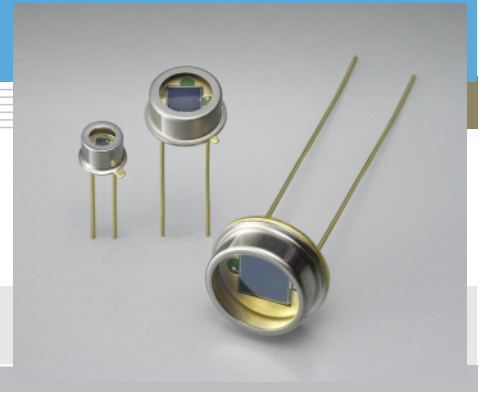


Si photodiode S1226 series

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

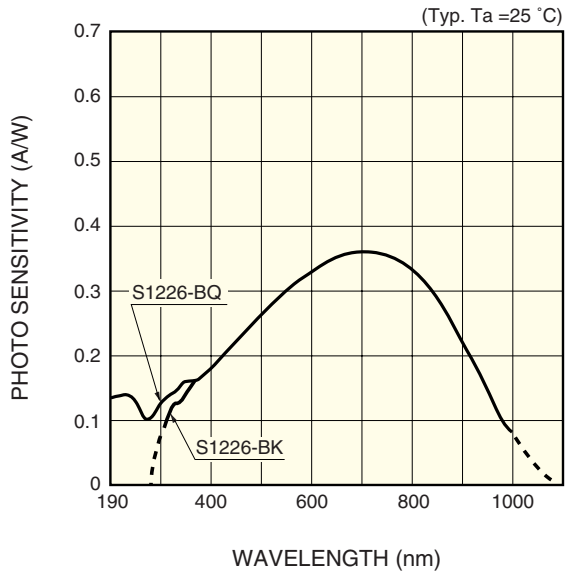
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings				
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)		
S1226-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +80		
S1226-18BK	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 λ (nm)	Peak sensitivity wavelength λ_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 ^{1/2})		
			λ_p	200 nm		He-Ne laser 633 nm	Min. (μA)					Typ. (μA)	Min. (GΩ)		Typ. (GΩ)	
				Min.	Typ.											633 nm
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 ⁻¹⁵	
S1226-18BK	320 to 1000			-	-		2.2	2.9	5		0.5	160	2	20	2.5 × 10 ⁻¹⁵	
S1226-5BQ	190 to 1000			0.10	0.12		4.4	5.9	10		1	380	1	10	3.6 × 10 ⁻¹⁵	
S1226-5BK	320 to 1000			-	-		12	16	20		2	950	0.5	5	5.0 × 10 ⁻¹⁵	
S1226-44BQ	190 to 1000			0.10	0.12											
S1226-44BK	320 to 1000			-	-											
S1226-8BQ	190 to 1000			0.10	0.12											
S1226-8BK	320 to 1000			-	-											

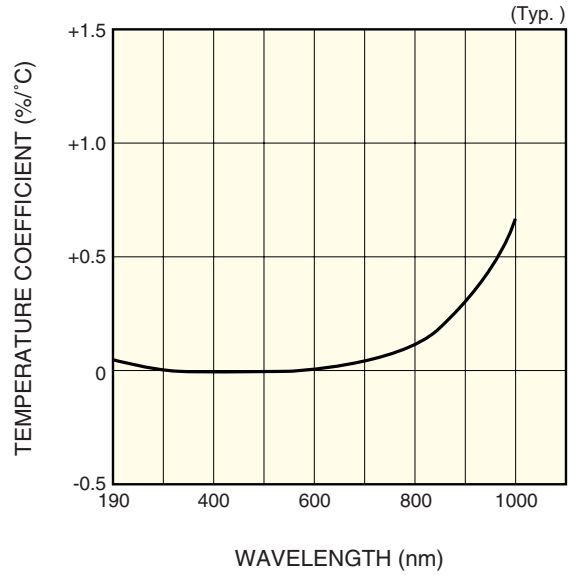
* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



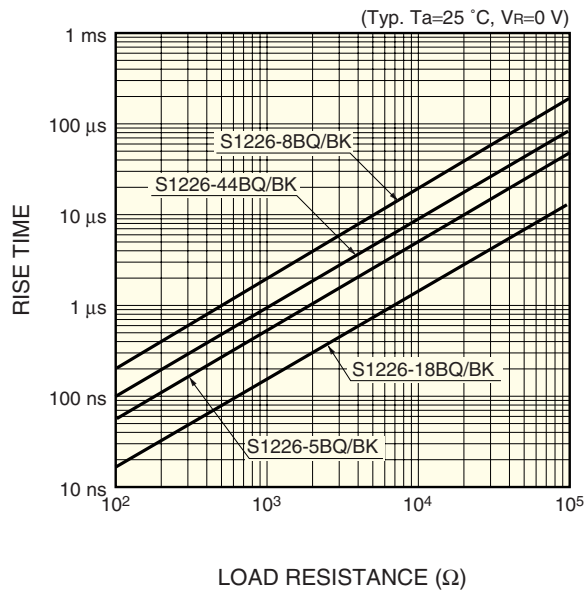
KSPDB0106EA

■ Photo sensitivity temperature characteristic



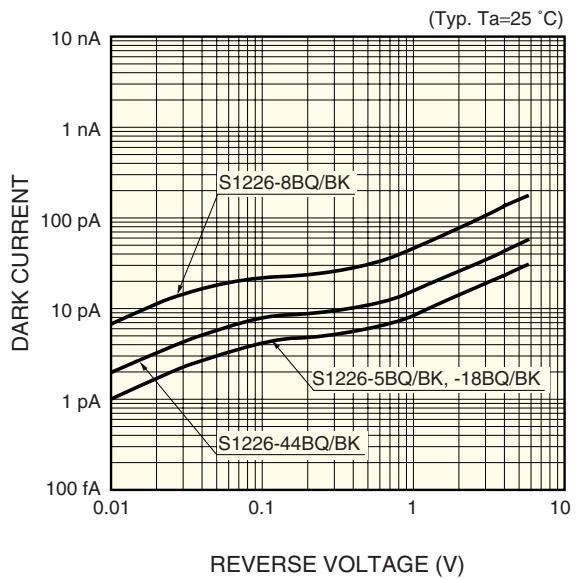
KSPDB0030EA

■ Rise time vs. load resistance



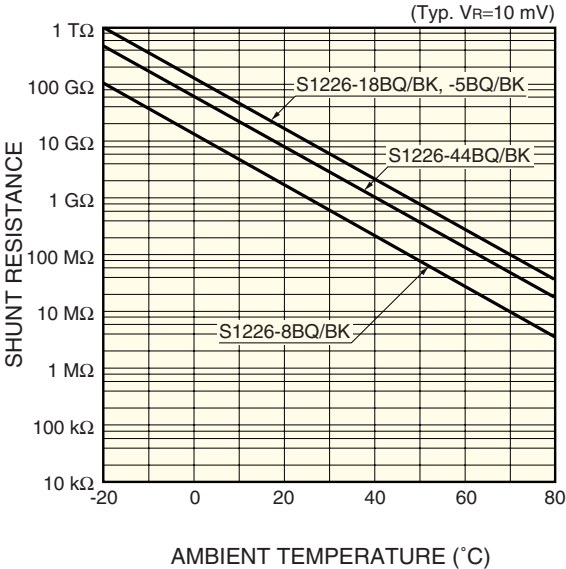
KSPDB0107EA

■ Dark current vs. reverse voltage



KSPDB0108EA

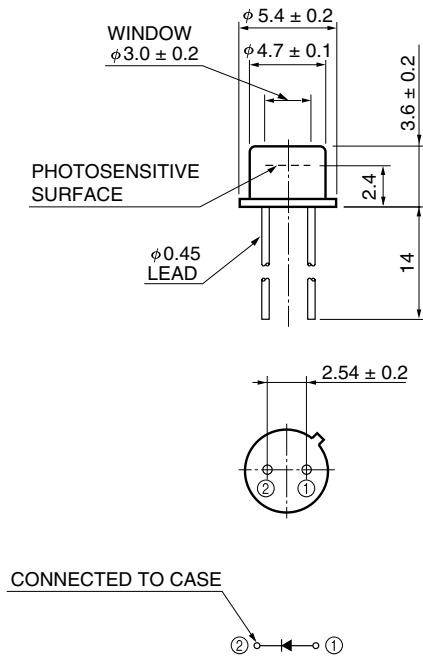
■ Shunt resistance vs. ambient temperature



KSPDB0109EA

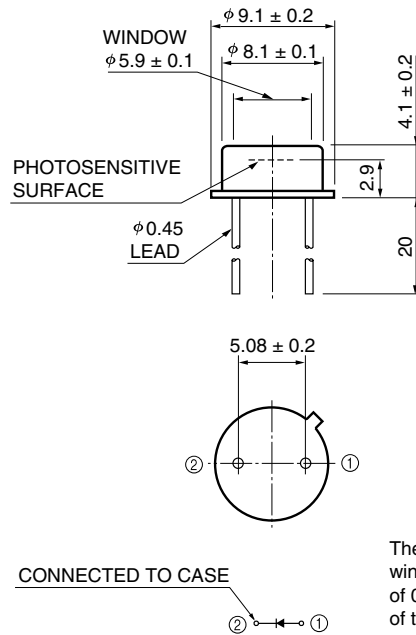
■ Dimensional outlines (unit: mm)

① S1226-18BQ/-18BK



KSPDA0113EB

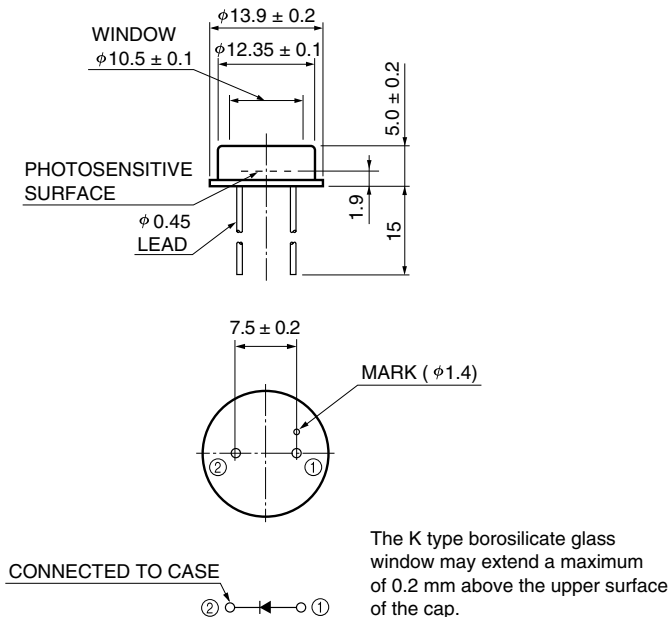
② S1226-5BQ/K, S1226-44BQ/K



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

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2002 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation, 360 Foothill Road, P.O. Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH, Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited, 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB, Smidsvågen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741