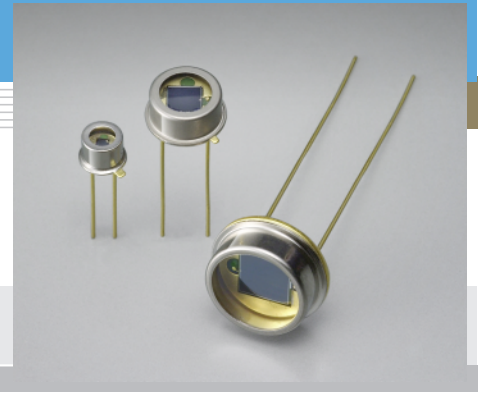


Si photodiode S1226 series

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

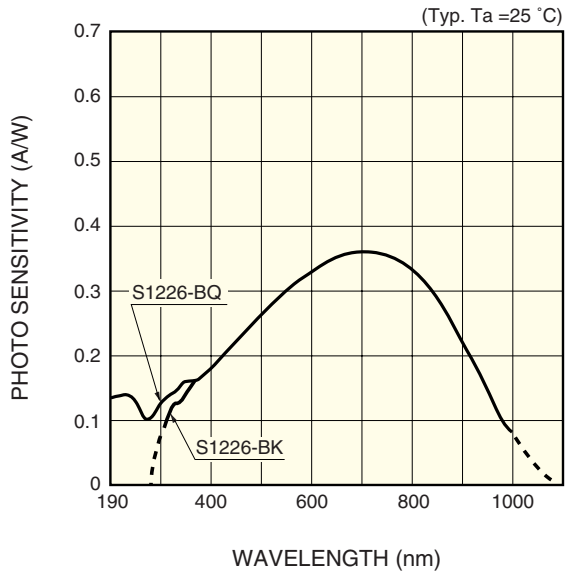
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings				
					Reverse voltage VR Max. (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)		
S1226-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +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 I _{sc} 100 lx		Dark current I _D VR=10 mV Max. (pA)	Temp. coefficient of I _D TCID (times/°C)	Rise time t _r VR=0 V RL=1 kΩ (μs)	Terminal capacitance C _t VR=0 V f=10 kHz (pF)	Shunt resistance R _{sh} 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.										
S1226-18BQ	190 to 1000	720	0.36	0.34	0.10	0.12	0.5	0.66	2	0.15	35	5	50	1.6 × 10 ⁻¹⁵	
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 ⁻¹⁵	
S1226-5BK	320 to 1000				-	-									
S1226-44BQ	190 to 1000				0.10	0.12	4.4	5.9	10	1	380	1	10	3.6 × 10 ⁻¹⁵	
S1226-44BK	320 to 1000				-	-									
S1226-8BQ	190 to 1000				0.10	0.12	12	16	20	2	950	0.5	5	5.0 × 10 ⁻¹⁵	
S1226-8BK	320 to 1000				-	-									

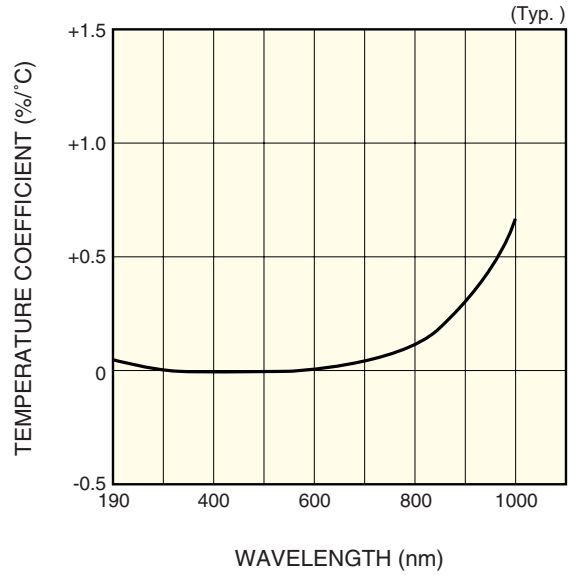
* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



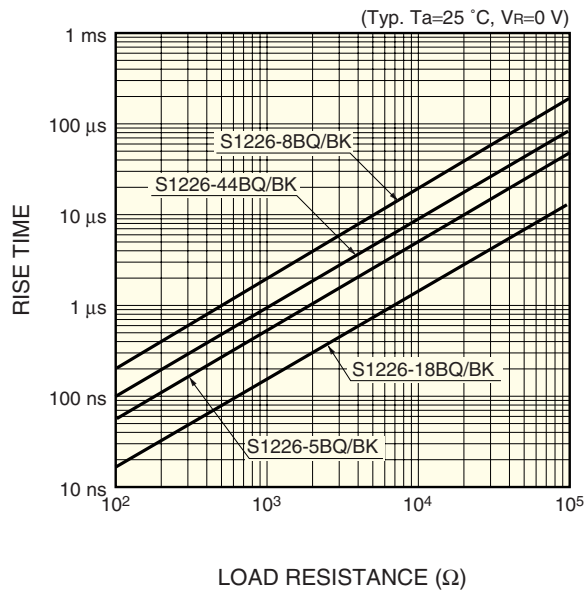
KSPDB0106EA

■ Photo sensitivity temperature characteristic



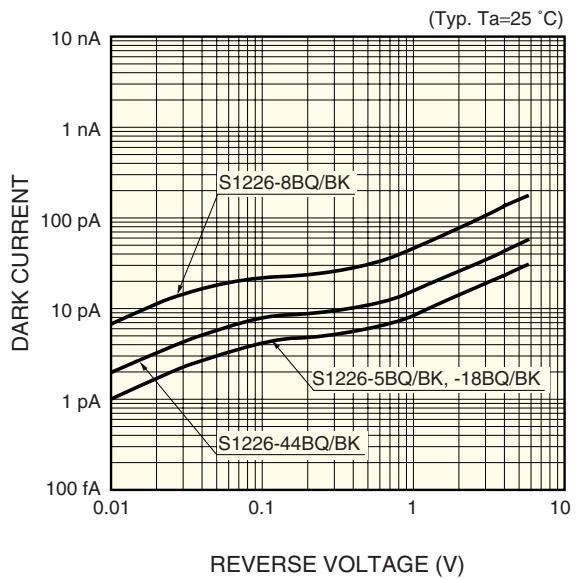
KSPDB0030EA

■ Rise time vs. load resistance



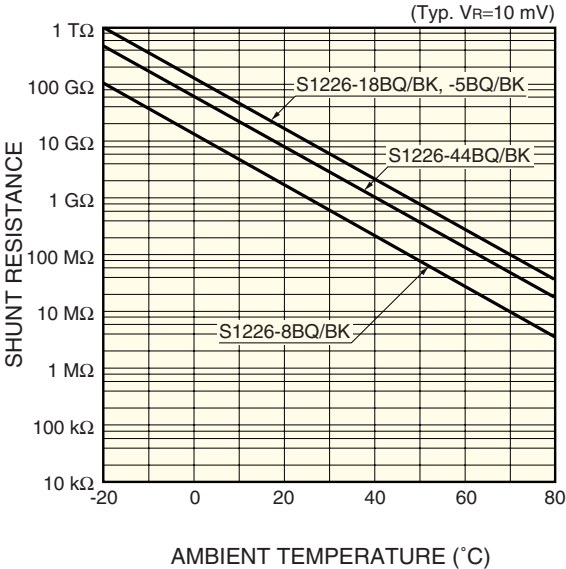
KSPDB0107EA

■ Dark current vs. reverse voltage



KSPDB0108EA

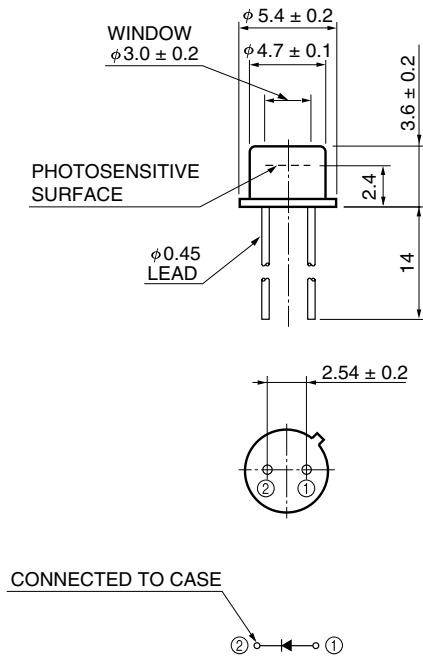
■ Shunt resistance vs. ambient temperature



KSPDB0109EA

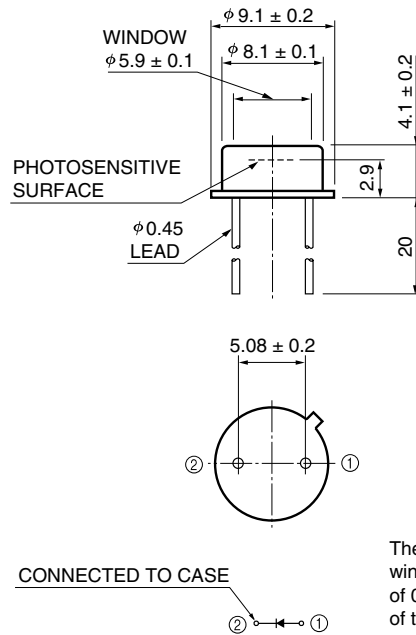
Dimensional outlines (unit: mm)

① S1226-18BQ/-18BK



KSPDA0113EB

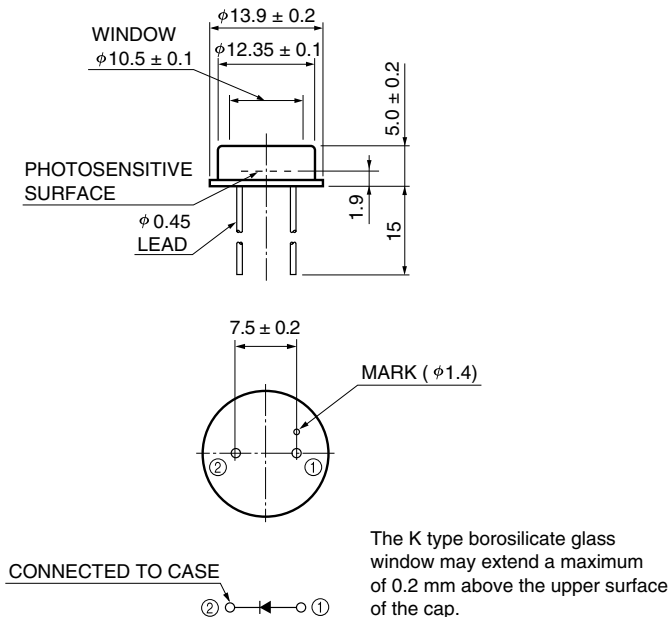
② S1226-5BQ/K, S1226-44BQ/K



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

KSPDA0114EA

③ S1226-8BQ/-8BK



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

KSPDA0115EA

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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

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 Twyn 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

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