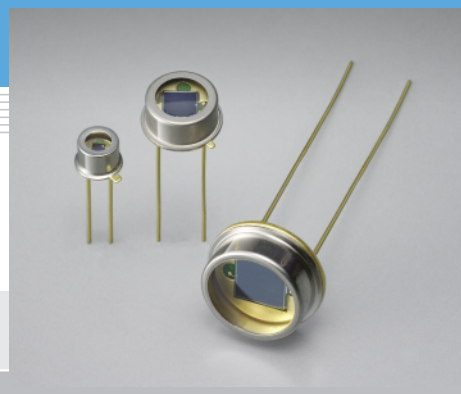


Si photodiode S1226 series

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

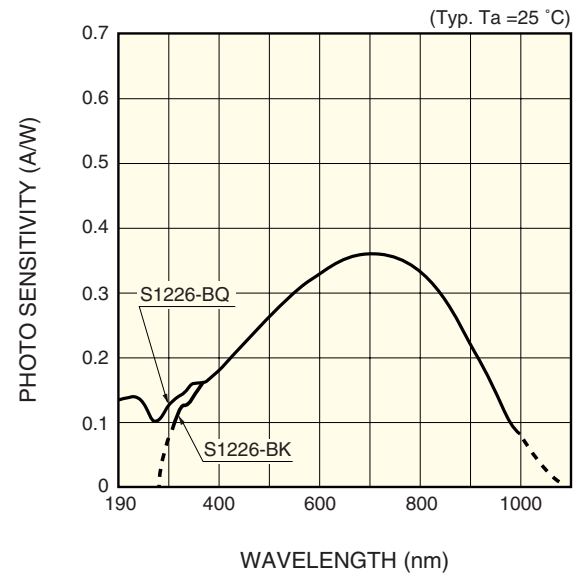
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum ratings		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
S1226-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +80
S1226-18BK	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.	Typ.																							
													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^{-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			-	-																							

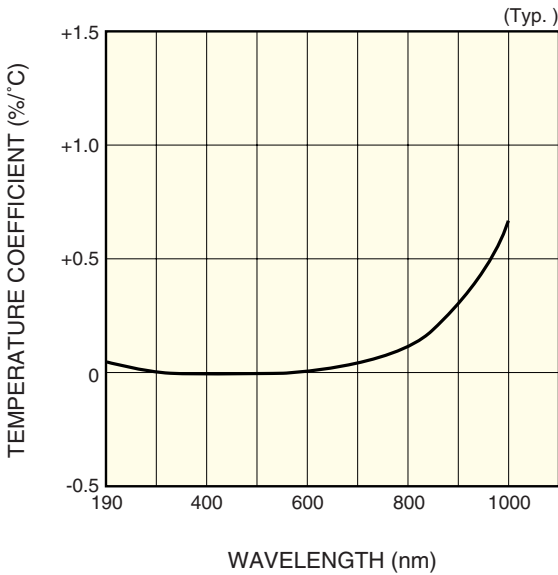
* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



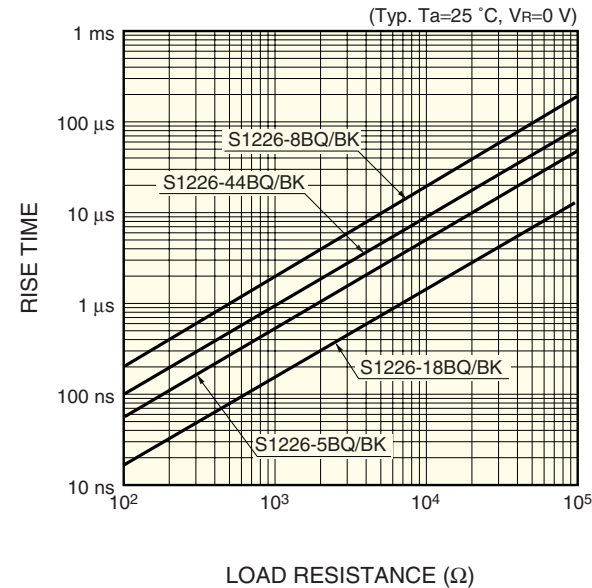
KSPDB0106EA

■ Photo sensitivity temperature characteristic



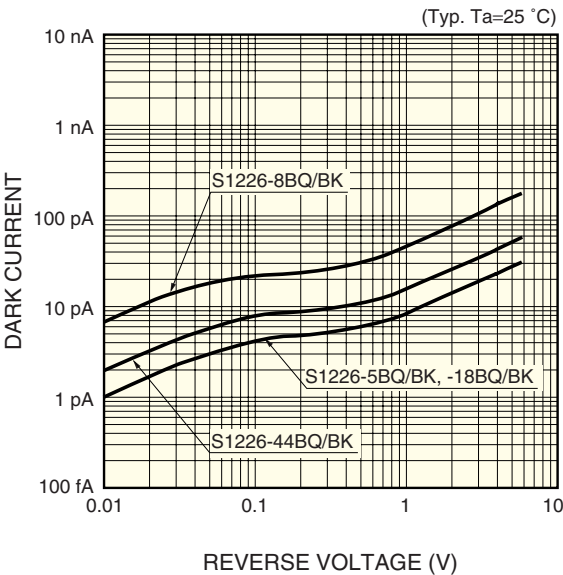
KSPDB0030EA

■ Rise time vs. load resistance



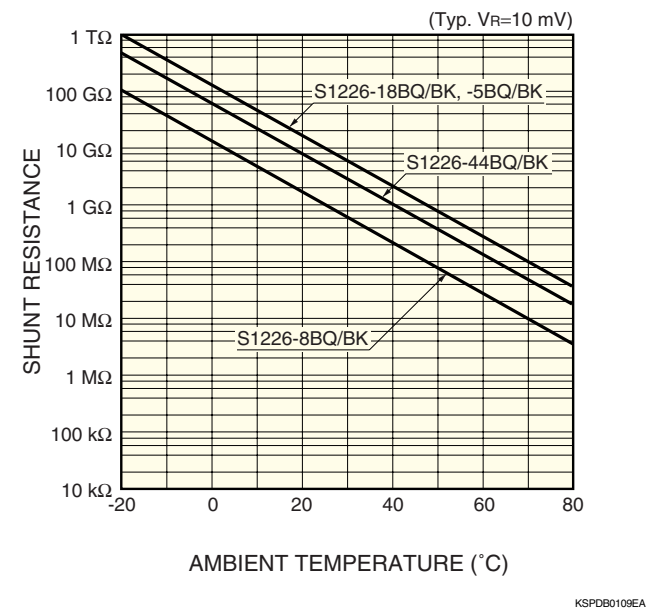
KSPDB0107EA

■ Dark current vs. reverse voltage



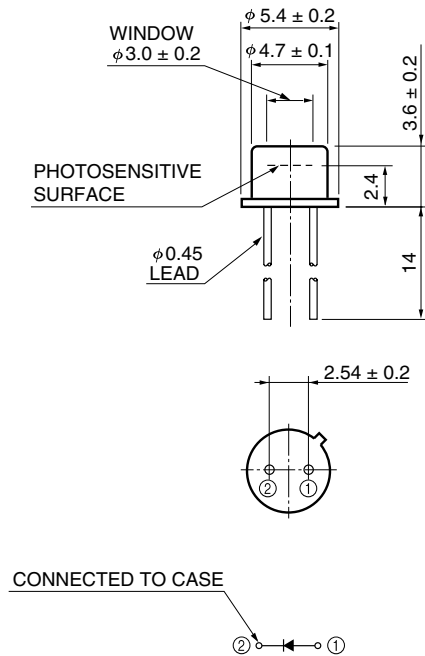
KSPDB0108EA

■ Shunt resistance vs. ambient temperature



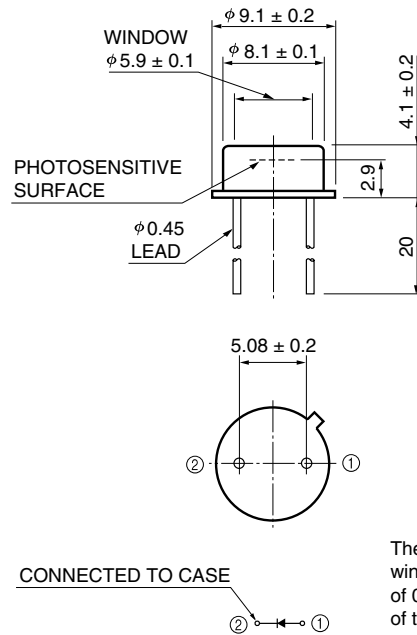
■ Dimensional outlines (unit: mm)

① S1226-18BQ/-18BK



KSPDA0113EB

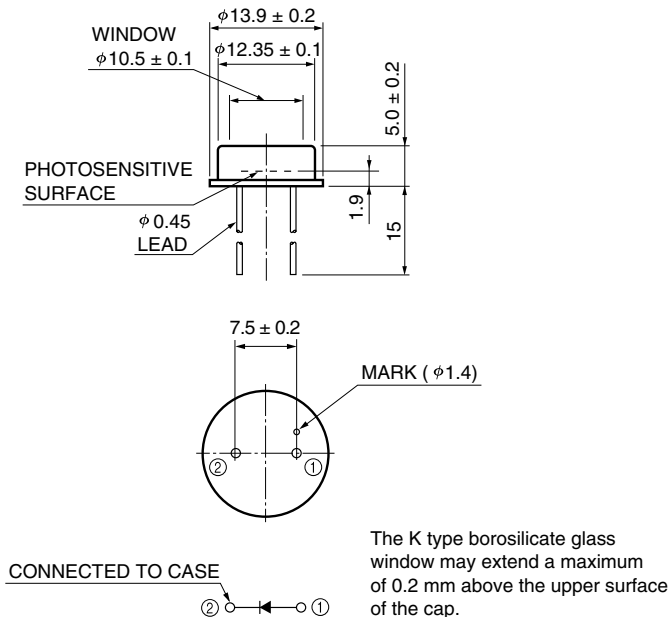
② S1226-5BQ/K, S1226-44BQ/K



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

HAMAMATSU

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