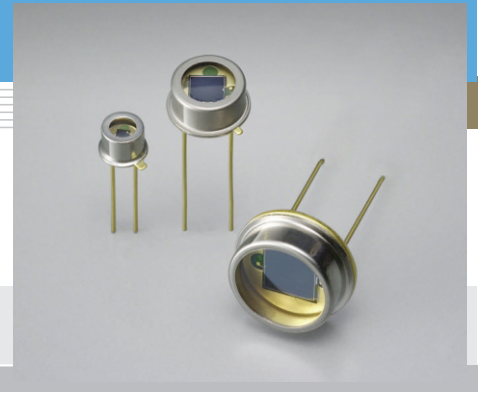


Si photodiode S1336 series

UV to near IR for precision photometry



Features

- High sensitivity
- Low capacitance
- High reliability

Applications

- Analytical instruments
- Optical measurement equipment

■ General ratings / Absolute maximum ratings

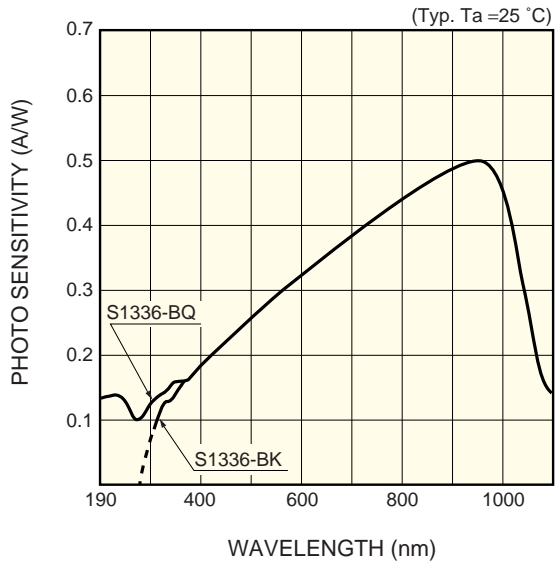
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum rating		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
S1336-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +80
S1336-18BK	①/K					-40 to +100	-55 to +125
S1336-5BQ	②/Q	TO-5	2.4 × 2.4	5.7		-20 to +60	-55 to +80
S1336-5BK	②/K					-40 to +100	-55 to +125
S1336-44BQ	②/Q					-20 to +60	-55 to +80
S1336-44BK	②/K					-40 to +100	-55 to +125
S1336-8BQ	③/Q	TO-8	5.8 × 5.8	33		-20 to +60	-55 to +80
S1336-8BK	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.												
S1336-18BQ	190 to 1100	960	0.5	0.10	0.12	0.33	1	1.2	1.15	0.1	20	0.5	2	5.7 × 10 ⁻¹⁵			
S1336-18BK	320 to 1100						0.9	1.0									
S1336-5BQ	190 to 1100						0.10	0.12							4	5	30
S1336-5BK	320 to 1100						-	-							8	10	50
S1336-44BQ	190 to 1100						0.10	0.12							22	28	100
S1336-44BK	320 to 1100						-	-							-	-	-
S1336-8BQ	190 to 1100						0.10	0.12							-	-	-
S1336-8BK	320 to 1100						-	-							-	-	-

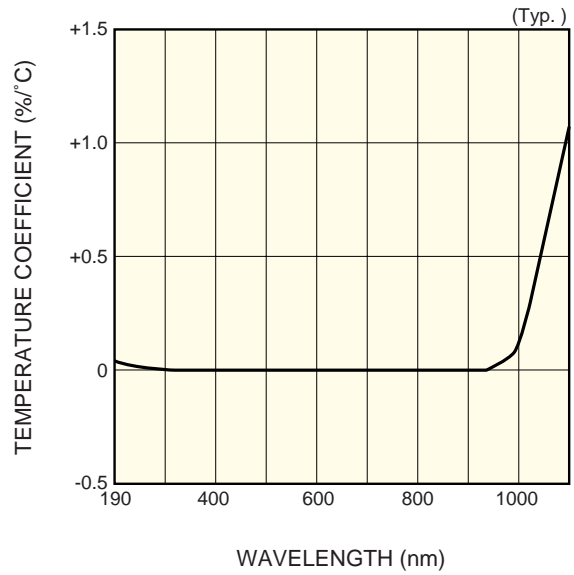
* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



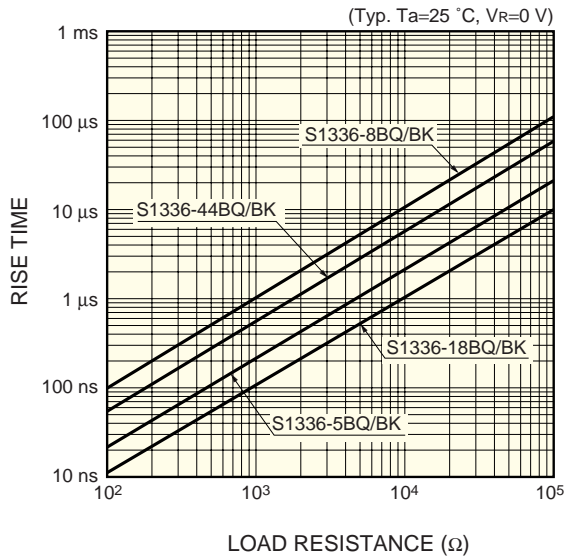
KSPDB0098EA

■ Photo sensitivity temperature characteristic



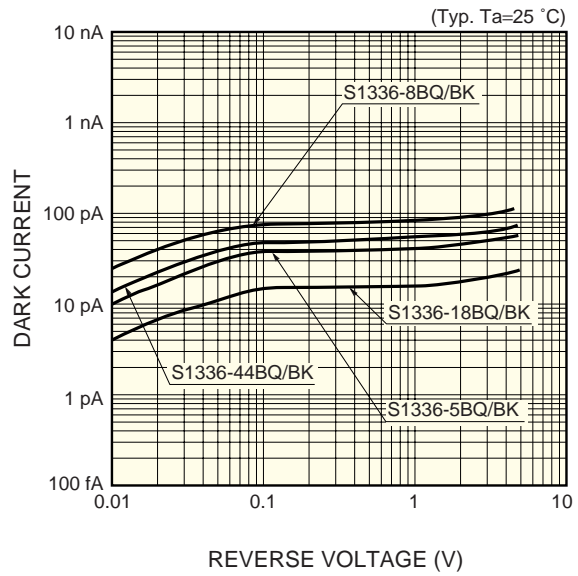
KSPDB0053EB

■ Rise time vs. load resistance



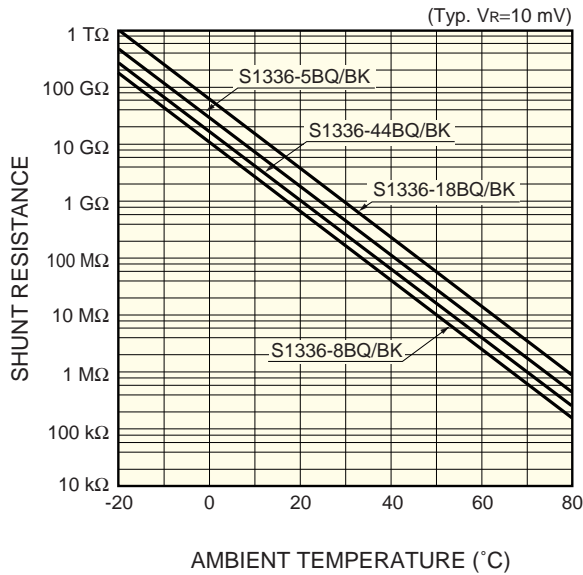
KSPDB0099EA

■ Dark current vs. reverse voltage



KSPDB0100EA

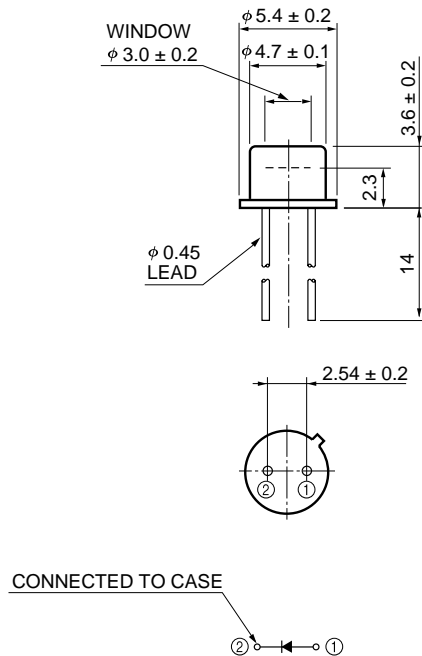
■ Shunt resistance vs. ambient temperature



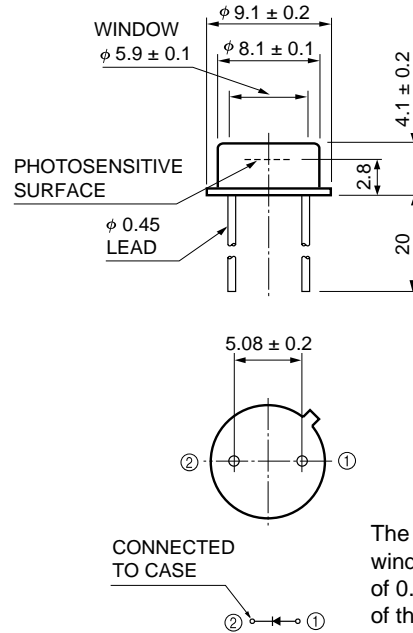
KSPDB0101EA

■ Dimensional outlines (unit: mm)

① S1336-18BQ/-18BK



② S1336-5BQ/K, S1336-44BQ/K

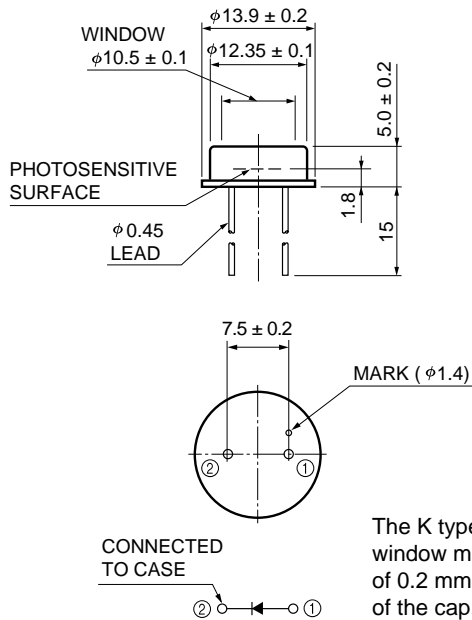


The K type borosilicate glass window may extend a maximum of 0.2 mm above the upper surface of the cap.

KSPDA0102EB

KSPDA0103EA

③ S1336-8BQ/-8BK



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

KSPDA0104EA

Information described in this material is current as of June, 2011. Product specifications are subject to change without prior notice due to improvements or other reasons. Before assembly into final products, please contact us for the delivery specification sheet to check the latest information.

Type numbers of products listed in the delivery specification sheets or supplied as samples may have a suffix "(X)" which means preliminary specifications or a suffix "(Z)" which means developmental specifications.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use.

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