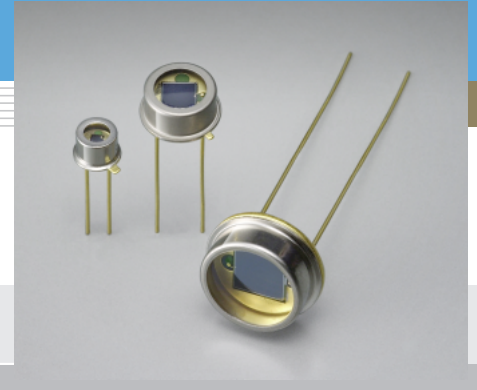


Si photodiode S1336 series

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

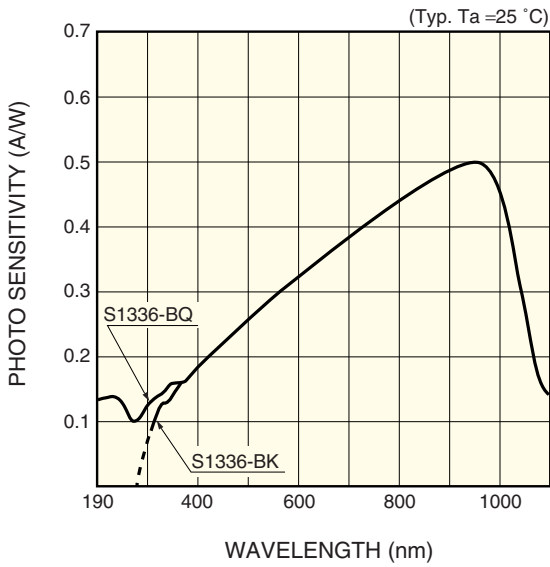
Type No.	Dimensional outline/ Window material *	Package (mm)	Active area size (mm)	Effective active area (mm ²)	Absolute maximum rating		
					Reverse voltage VR Max. (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
S1336-18BQ	①/Q	TO-18	1.1 × 1.1	1.2	5	-20 to +60	-55 to +80
S1336-18BK	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					3.6 × 3.6	13
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		Min.	Typ.					Min.	Typ.											
				Min.	Typ.										(GΩ)	(GΩ)								
S1336-18BQ	190 to 1100	960	0.5	0.10	0.12	0.33	1	1.2	20	1.15	20	0.5	2	5.7 × 10 ⁻¹⁵										
S1336-18BK	320 to 1100														-	-								
S1336-5BQ	190 to 1100														0.10	0.12	4	5	30	0.2	65	0.3	1	8.1 × 10 ⁻¹⁵
S1336-5BK	320 to 1100														-	-	8	10	50	0.5	150	0.2	0.6	1.0 × 10 ⁻¹⁴
S1336-44BQ	190 to 1100														0.10	0.12								
S1336-44BK	320 to 1100														-	-	22	28	100	1	380	0.1	0.4	1.3 × 10 ⁻¹⁴
S1336-8BQ	190 to 1100														0.10	0.12								
S1336-8BK	320 to 1100														-	-								

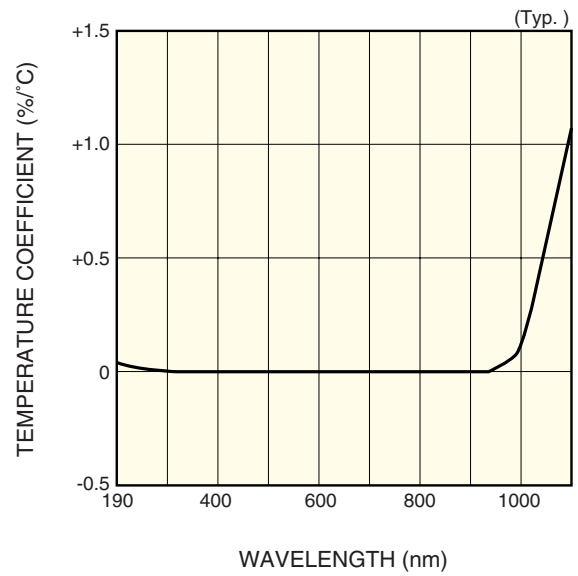
* Window material, K: borosilicate glass, Q: quartz glass

■ Spectral response



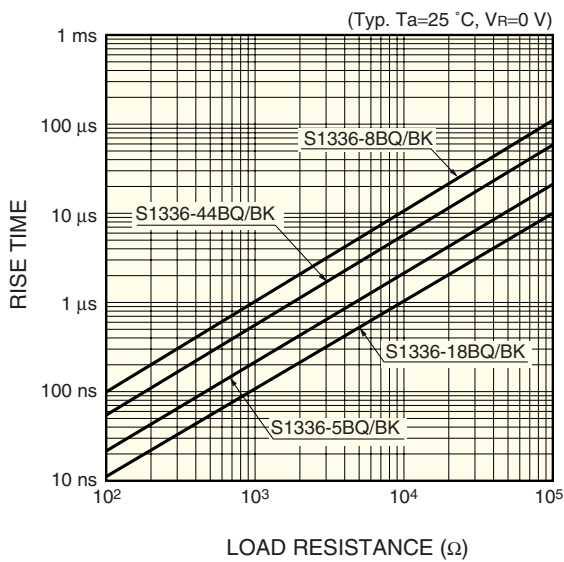
KSPDB0098EA

■ Photo sensitivity temperature characteristic



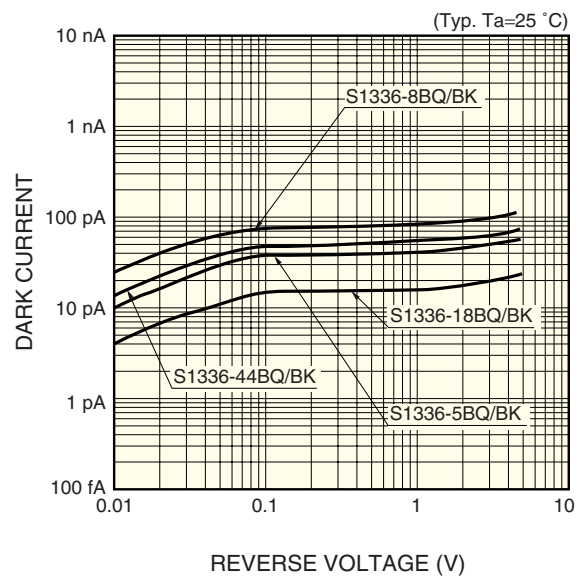
KSPDB0063EB

■ Rise time vs. load resistance



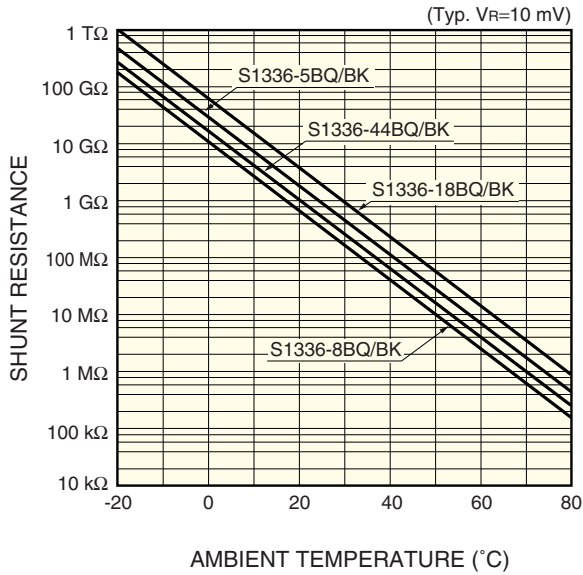
KSPDB0099EA

■ Dark current vs. reverse voltage



KSPDB0100EA

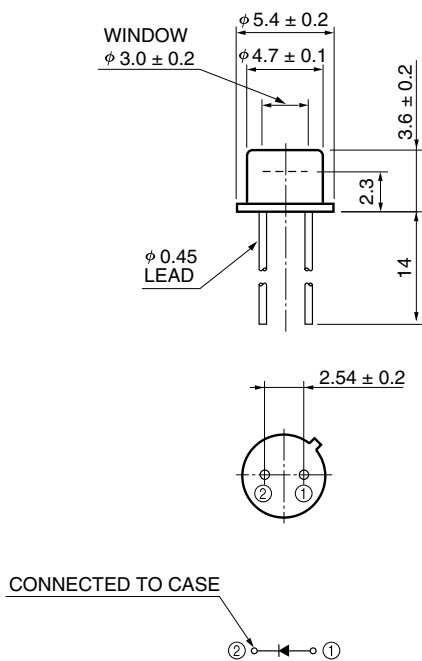
■ Shunt resistance vs. ambient temperature



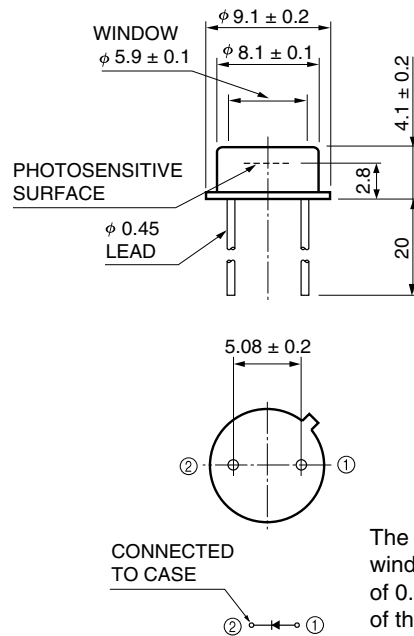
KSPDB0101EA

■ Dimensional outlines (unit: mm)

① S1336-18BQ/-18BK



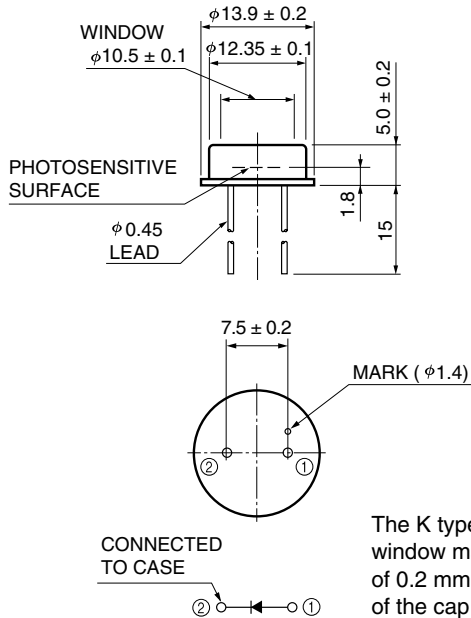
② S1336-5BQ/K, S1336-44BQ/K



KSPDA0102EB

KSPDA0103EA

③ S1336-8BQ/-8BK



KSPDA0104EA

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