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TECHNOLOGY GROUP

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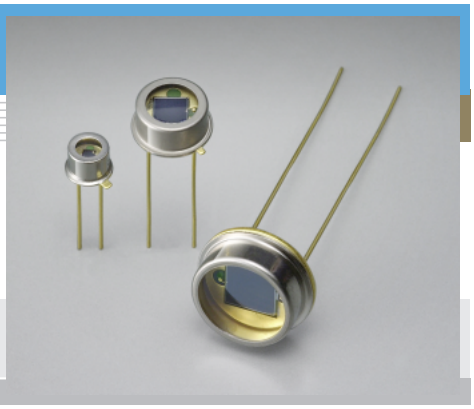
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Si photodiode
S1336 series

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 V_R 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		-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)

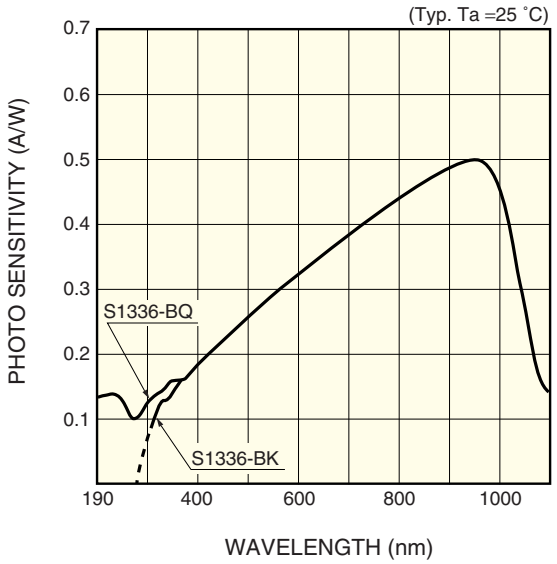
Type No.	Spectral response range λ (nm)	Peak sensitivity wavelength λp (nm)	Photo sensitivity S (A/W)				Short circuit current Isc 100 lx		Dark current I_D V_R=10 mV Max. (pA)	Temp. coefficient of I_D T_{CID} (times/°C)	Rise time tr V_R=0 V R_L=1 kΩ (μs)	Terminal capacitance Ct V_R=0 V f=10 kHz (pF)	Shunt resistance Rsh V_R=10 mV		NEP (W/$Hz^{1/2}$)
			λp	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	20	1.15	0.1	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			-	-										
S1336-44BQ	190 to 1100			0.10	0.12		8	10	50		0.5	150	0.2	0.6	1.0×10^{-14}
S1336-44BK	320 to 1100			-	-										
S1336-8BQ	190 to 1100			0.10	0.12		22	28	100		1	380	0.1	0.4	1.3×10^{-14}
S1336-8BK	320 to 1100			-	-										

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

SOLID STATE DIVISION

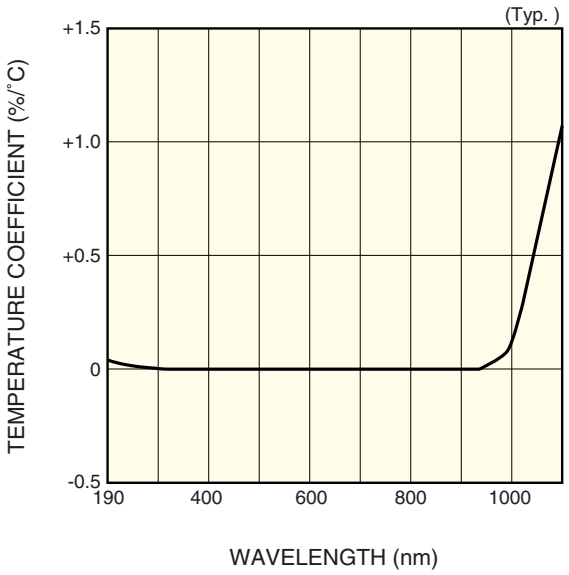
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■ Spectral response



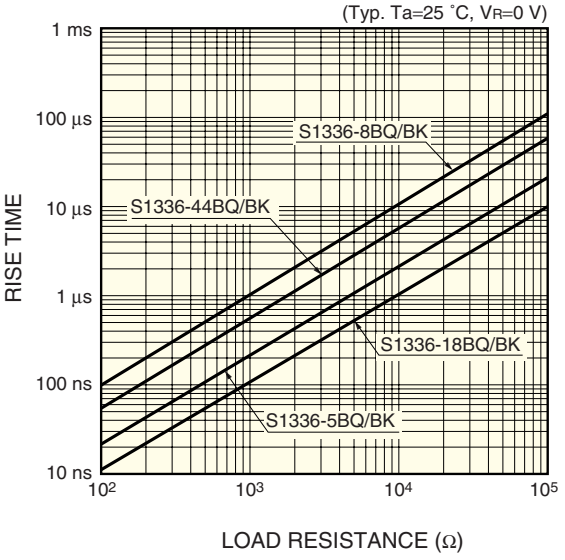
KSPDB0098EA

■ Photo sensitivity temperature characteristic



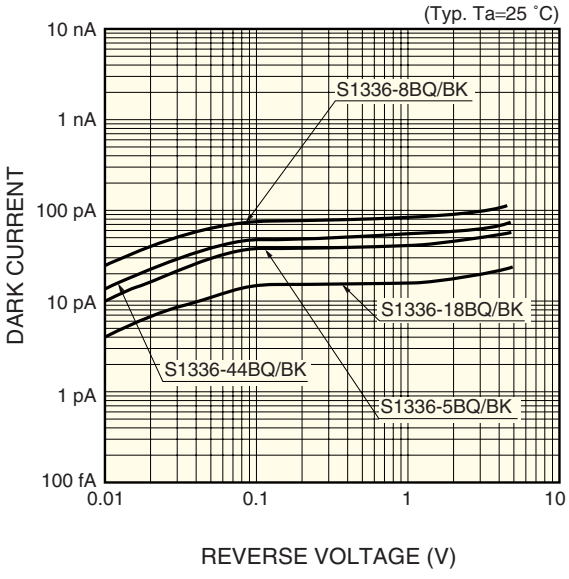
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■ Rise time vs. load resistance



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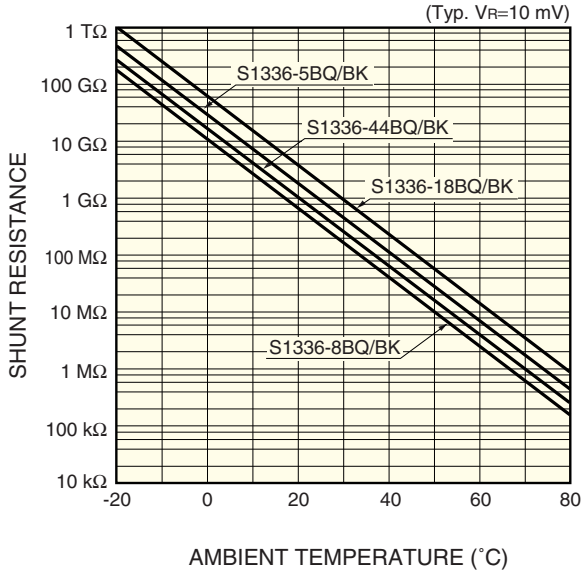
■ Dark current vs. reverse voltage



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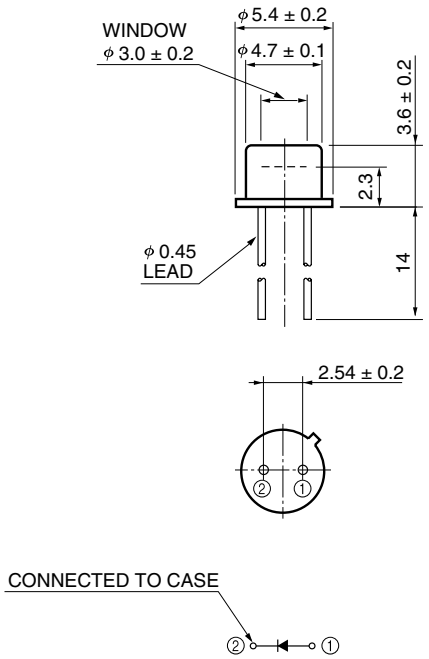
■ Shunt resistance vs. ambient temperature



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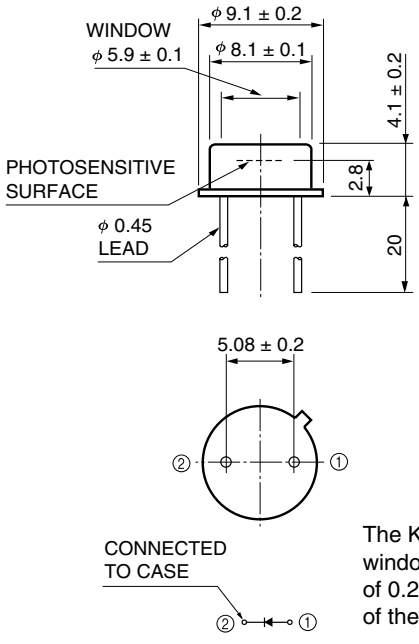
■ Dimensional outlines (unit: mm)

① S1336-18BQ/-18BK



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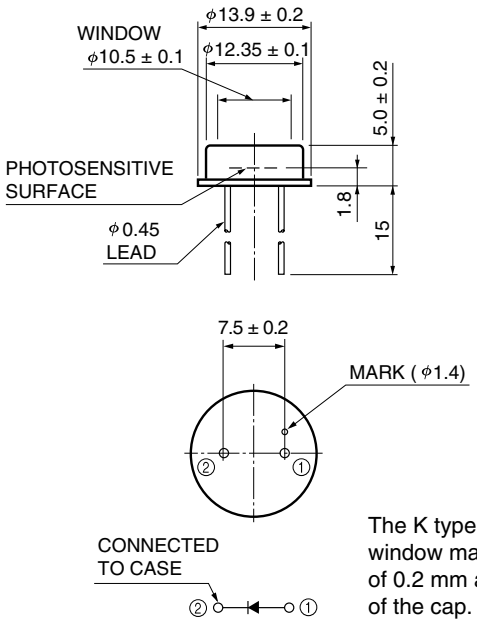
② S1336-5BQ/K, S1336-44BQ/K



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

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

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