

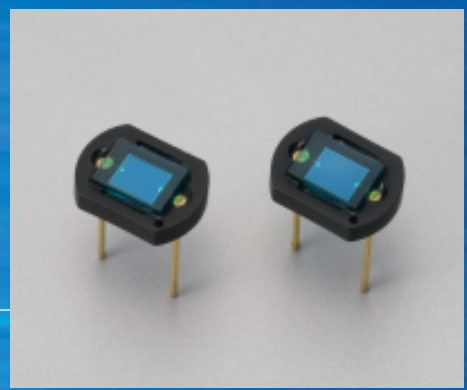
NEW

PHOTODIODE

Si photodiode

S8265

Visible sensitivity photodiode with high humidity resistance

**Features**

- High humidity resistance (85 °C, 85 %, 1000 h)
- Visible-compensation filter
- Ceramic package (6 × 8 mm)
- Active area: 2.8 × 2.4 mm

Applications

- Light dimmer in locations at high humidity or for outdoor use

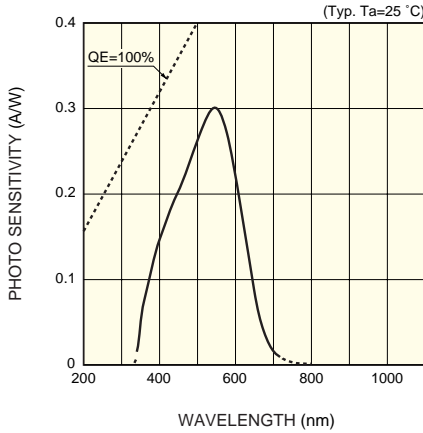
■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Value	Unit
Reverse voltage	V _R Max.	10	V
Operating temperature	T _{opr}	-25 to +85	°C
Storage temperature	T _{stg}	-40 to +85	°C

■ Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	340 to 720	-	nm
Peak sensitivity wavelength	λ_p		-	540	-	nm
Photo sensitivity	S	$\lambda = \lambda_p$	-	0.3	-	A/W
Short circuit current	I _{sc}	100 lx, 2856 K	0.40	0.52	-	μ A
Dark current	I _D	V _R =1 V	-	3	20	pA
Rise time	t _r	V _R =0 V, R _L =1 k Ω	-	0.5	-	μ s
Terminal capacitance	C _t	V _R =0 V, f=10 kHz	-	230	-	pF

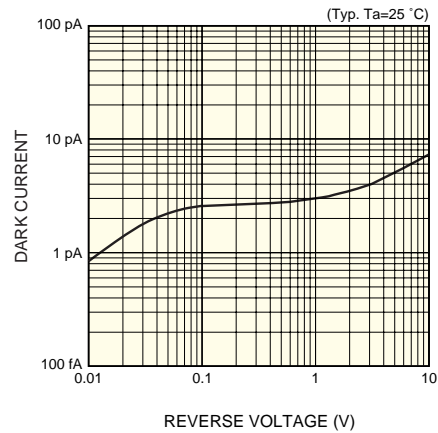
■ Spectral response



Almost no decrease in photo sensitivity even after 1000 hours of operation at 85 °C and RH 85 %

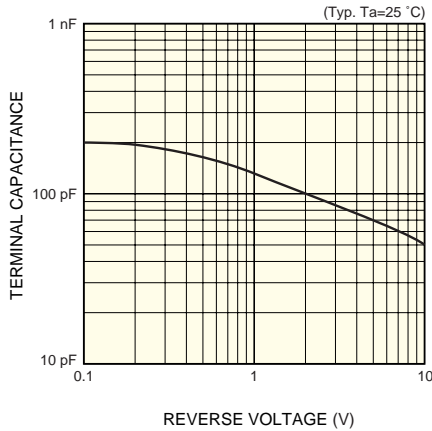
KSPDB0164EA

■ Dark current vs. reverse voltage



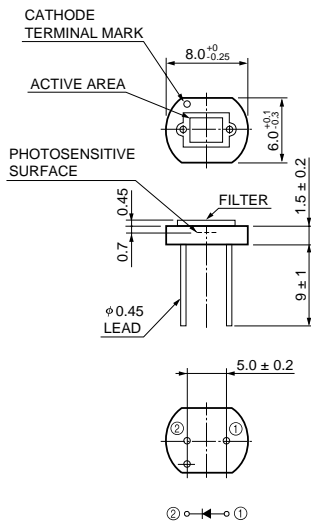
KSPDB0170EA

■ Terminal capacitance vs. reverse voltage



KSPDB0171EA

■ Dimensional outline (unit: mm)



KSPDA0127EA