



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)

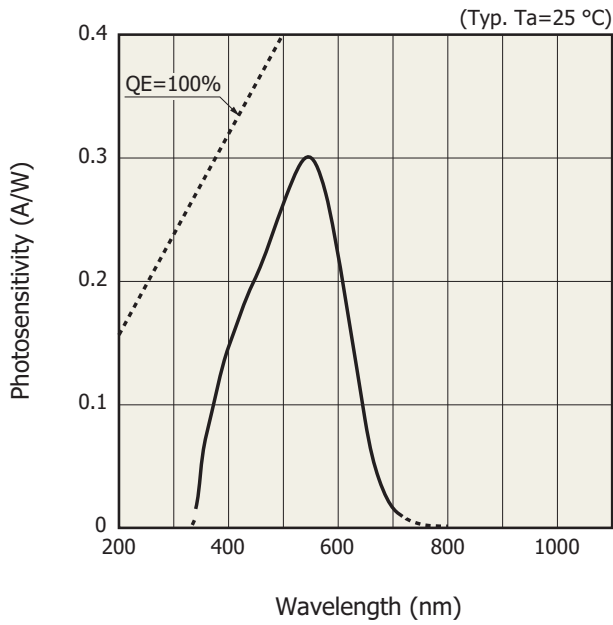
Parameter	Symbol	Value	Unit
Reverse voltage	V _R Max.	10	V
Operating temperature	T _{opr}	-25 to +85	°C
Storage temperature	T _{stg}	-40 to +85	°C

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

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
Photosensitivity	S	$\lambda = \lambda_p$	-	0.3	-	A/W
Short circuit current	I _{sc}	100 lx, 2856 K	0.40	0.52	-	μA
Dark current	I _D	V _R =1 V	-	3	20	pA
Rise time	t _r	V _R =0 V, R _L =1 kΩ	-	0.5	-	μs
Terminal capacitance	C _t	V _R =0 V, f=10 kHz	-	230	-	pF

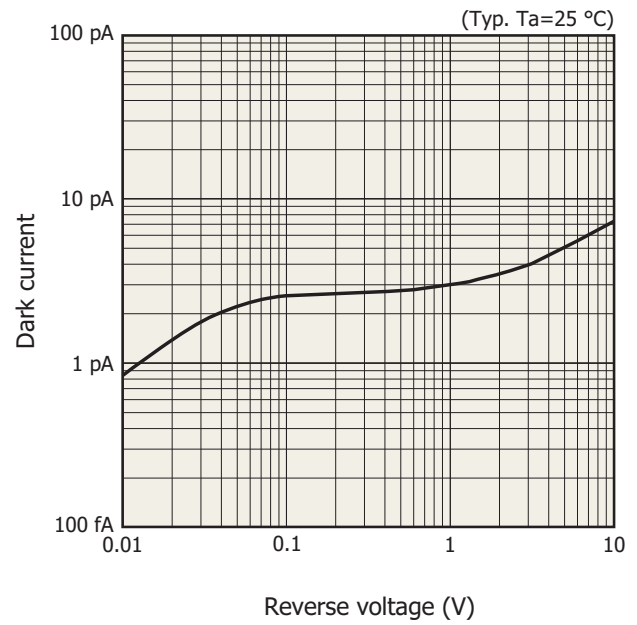
Spectral response



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

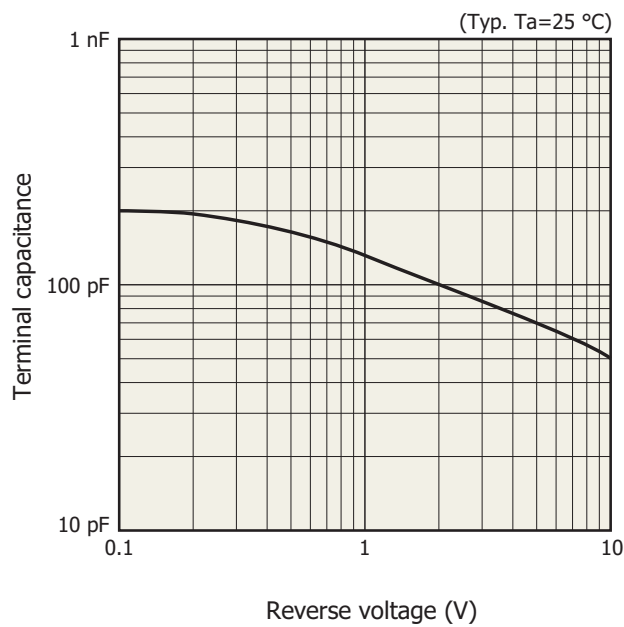
KSPDB0164EA

Dark current vs. reverse voltage



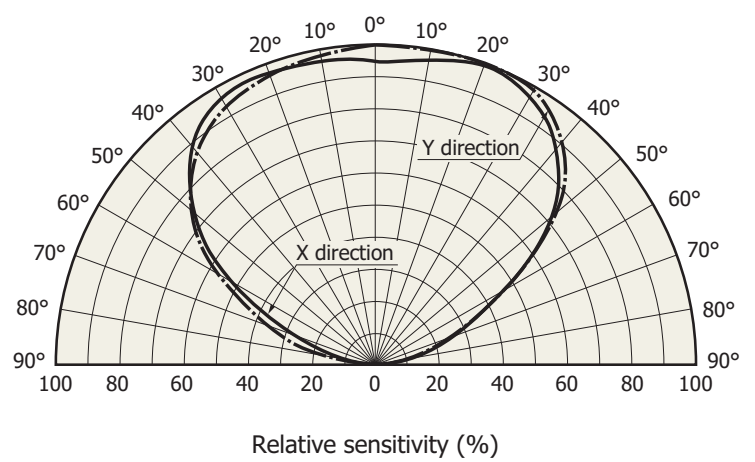
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Terminal capacitance vs. reverse voltage



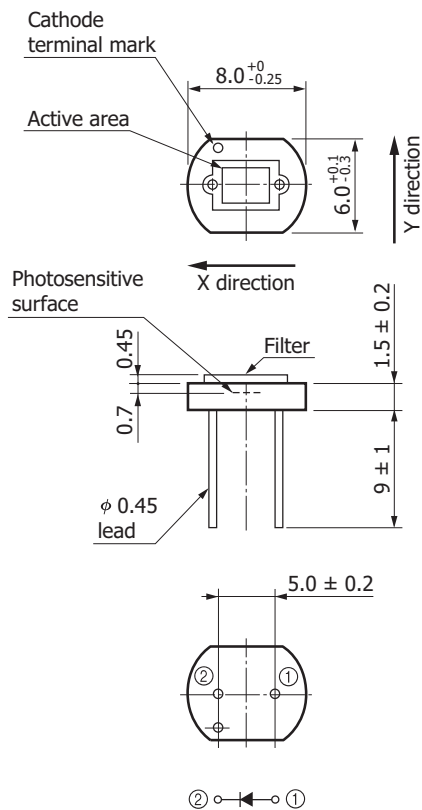
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Directivity



KSPDB0340EA

Dimensional outline (unit: mm)



KSPDA0127EB

Information described in this material is current as of December, 2013.

Product specifications are subject to change without prior notice due to improvements or other reasons. This document has been carefully prepared and the information contained is believed to be accurate. In rare cases, however, there may be inaccuracies such as text errors. Before using these products, always contact us for the delivery specification sheet to check the latest 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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