

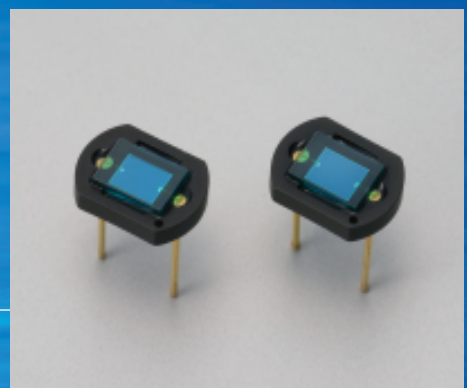
NEW

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

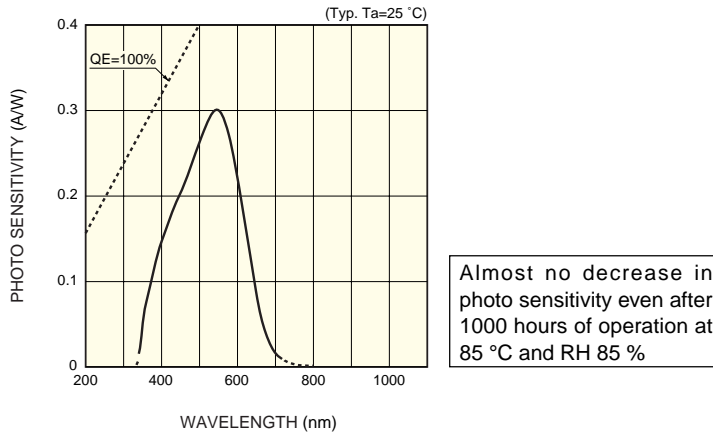
■ Absolute maximum ratings (Ta=25 °C)

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)

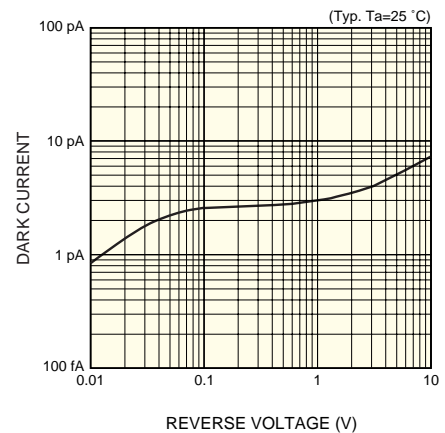
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	340 to 720	-	nm
Peak sensitivity wavelength	λ_p		-	540	-	nm
Photo sensitivity	S	$\lambda = \lambda_p$	-	0.3	-	A/W
Short circuit current	I _{sc}	100 lx, 2856 K	0.40	0.52	-	μA
Dark current	I _D	V _R =1 V	-	3	20	pA
Rise time	t _r	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



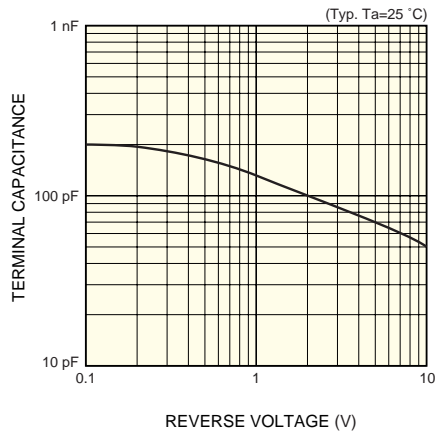
KSPDB0164EA

■ Dark current vs. reverse voltage



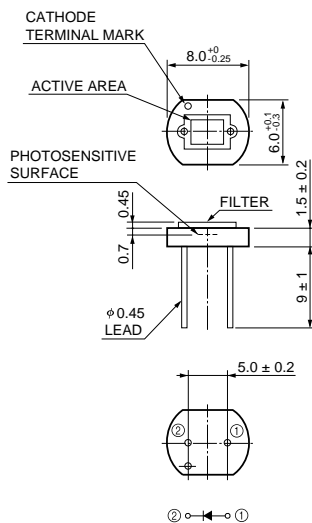
KSPDB0170EA

■ Terminal capacitance vs. reverse voltage



KSPDB0171EA

■ Dimensional outline (unit: mm)



KSPDA0127EA

HAMAMATSU

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2001 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741