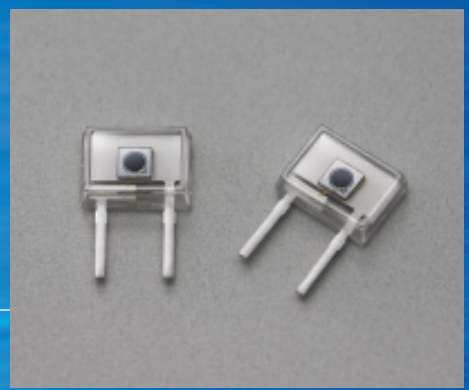


Si PIN photodiode

S8463

Miniature, thin plastic package photodiode



Features

- Clear plastic package: $3 \times 4 \times 1.3$ mm
- Active area: $\phi 0.8$ mm
- High sensitivity: 0.48 A/W Typ. ($\lambda=780$ nm)
- High-speed response: 200 MHz Typ. ($V_R=5$ V)

Applications

- Front monitors for optical disk laser diodes
- Sensors for red laser diodes (650 nm) and near IR laser diodes (780 nm)

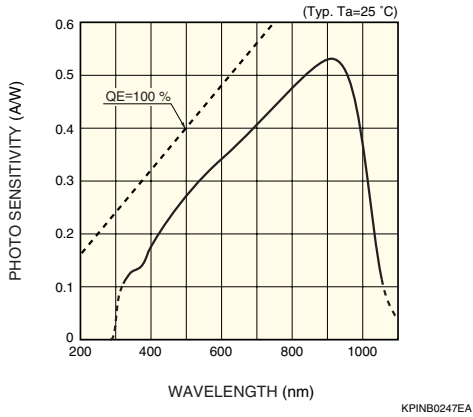
■ Absolute maximum ratings ($T_a=25$ °C)

Parameter	Symbol	Value	Unit
Reverse voltage	V_R Max.	20	V
Operating temperature	T_{opr}	-25 to +85	°C
Storage temperature	T_{stg}	-40 to +100	°C

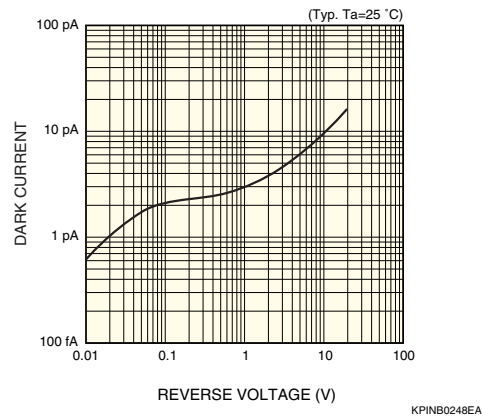
■ Electrical and optical characteristics ($T_a=25$ °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	320 to 1060	-	nm
Peak sensitivity wavelength	λ_p		-	900	-	nm
Photo sensitivity	S	$\lambda=780$ nm	0.43	0.48	-	A/W
Short circuit current	I_{sc}	100 lx, 2856 K	0.55	0.7	-	μ A
Dark current	I_D	$V_R=5$ V	-	0.01	1	nA
Terminal capacitance	C_t	$V_R=5$ V, $f=1$ MHz	-	3	6	pF
Cut-off frequency	f_c	$V_R=5$ V, $R_L=50$ Ω -3 dB	100	200	-	MHz

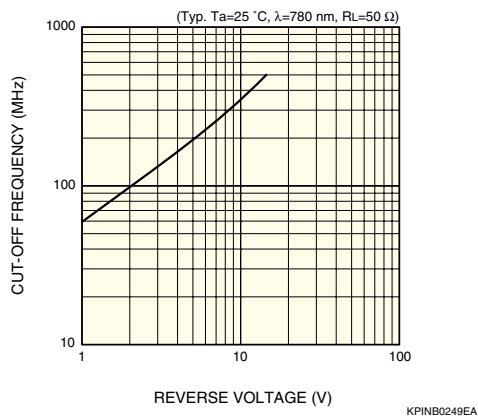
■ Spectral response



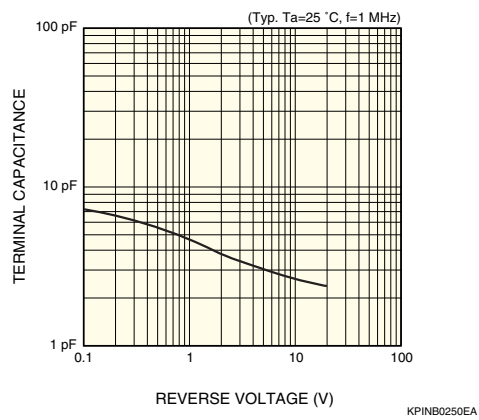
■ Dark current vs. reverse voltage



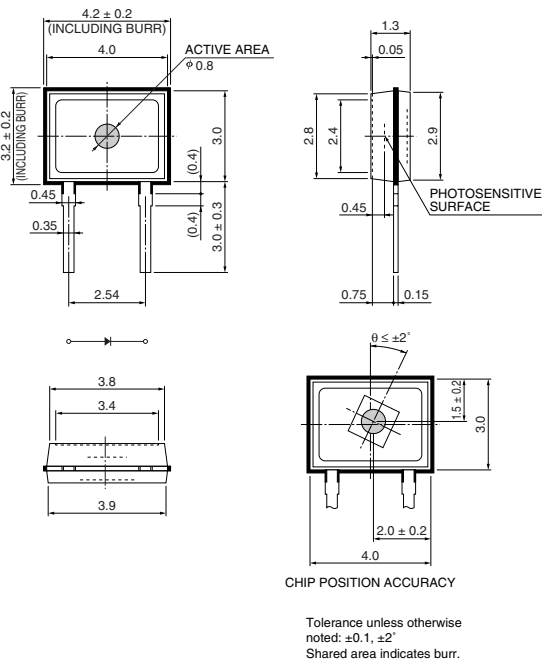
■ Cut-off frequency vs. reverse voltage



■ Terminal capacitance vs. reverse voltage



■ Dimensional outline (unit: mm)

**HAMAMATSU**

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

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