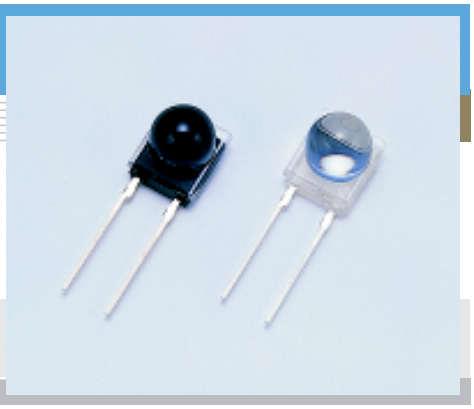
Si PIN photodiode
S6036 series

ϕ7 mm lens plastic package



S6036 series is Si PIN photodiode molded into a plastic package with a ϕ7 mm lens. Two types are available: S6036 of clear plastic package and S6036-01 of visible-cut package.

Features

- Plastic package with ϕ7 mm lens
- High-speed response: 25 MHz Typ. (V_R=12 V, λ=850 nm)
- High sensitivity: 0.56 A/W (λ=λp)
- Directivity: ±25° (half angle)
- S6036-01: visible-cut type

Applications

- Spatial light transmission
- Optical communications
- Optical data link
- High-speed optical measurement
- Optical switches
- Laser radars

■ Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage	V_R Max.	35	V
Operating temperature	Topr	-25 to +85	°C
Storage temperature	Tstg	-40 to +100	°C

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

Parameter	Symbol	Condition	S6036			S6036-01			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Spectral response range	λ		-	320 to 1100	-	-	760 to 1100	-	nm
Peak sensitivity wavelength	λp		-	960	-	-	960	-	nm
Photo sensitivity	S	λ=λp	0.51	0.56	-	0.51	0.56	-	A/W
Short circuit current	Isc	100 *lx*, 2856 K	24	30	-	13	17	-	μA
Dark current	I_D	V_R=12 V	-	0.1	10	-	0.1	10	nA
Temperature coefficient of dark current	T_{CID}		-	1.15	-	-	1.15	-	times/°C
Cut-off frequency	fc	V_R=12 V, R_L=50 Ω λ=850 nm, -3 dB	10	25	-	10	25	-	MHz
Terminal capacitance	Ct	V_R=12 V, f=1 MHz	-	15	30	-	15	30	pF
Half angle	-		-	±25	-	-	±25	-	degree

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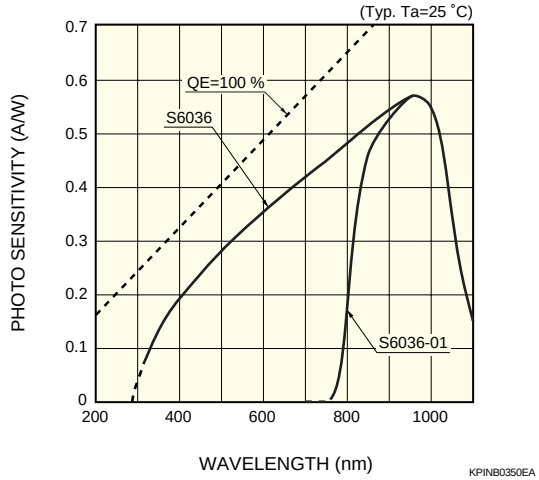
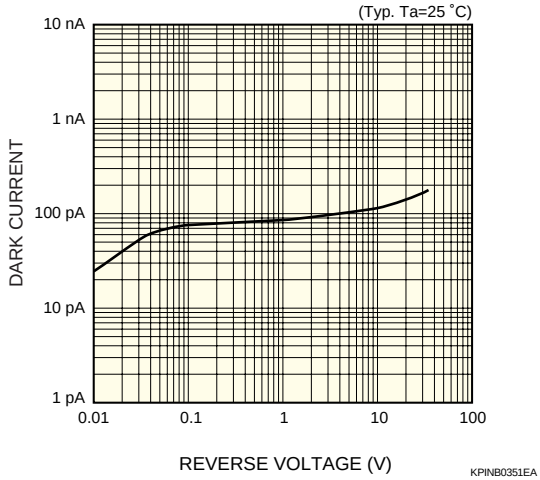
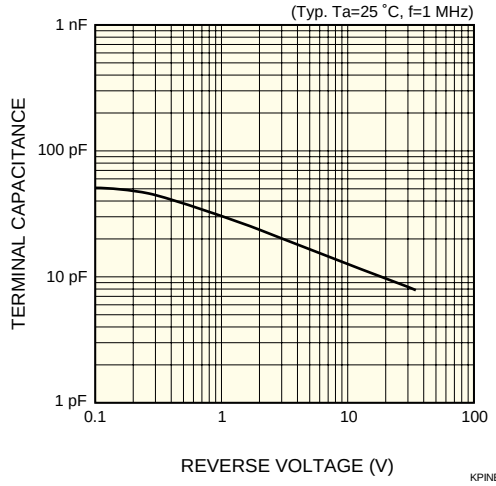
■ Spectral response



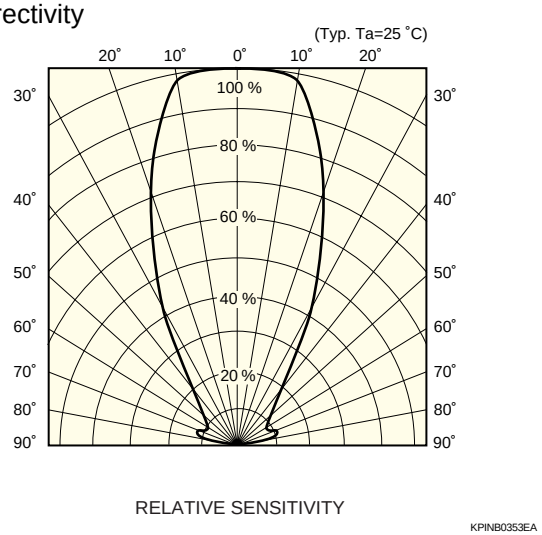
■ Dark current vs. reverse voltage



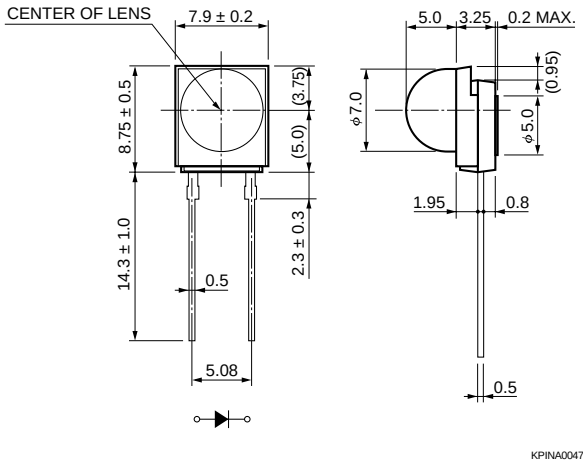
■ Terminal capacitance vs. reverse voltage



■ Directivity



■ Dimensional outline (unit: mm, tolerance unless otherwise noted: ±0.1)



HAMAMATSU PHOTONICS K.K., Solid State Division
1126-1 Ichino-cho, Higashi-ku, Hamamatsu City, 435-8558 Japan, Telephone: (81) 53-434-3311, Fax: (81) 53-434-5184, 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.: 19, 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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