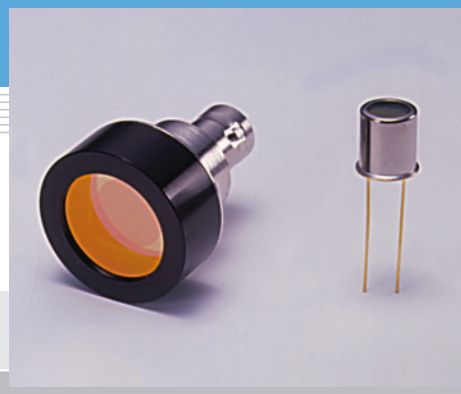


Si photodiode S7160 series

Spectral response like human eye



Features

- Accurate visible compensation filter is used
- High reliable metal package
- S7160: Metal package with BNC connector (active area: $\phi 11.3$ mm)
- S7160-01: TO-5 (active area: 3.6×3.6 mm)

Applications

- Photometry
- Luxmeter

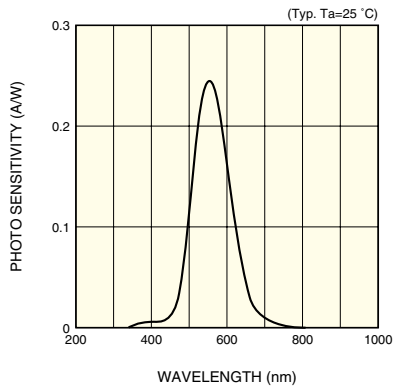
■ Absolute maximum ratings

Parameter	Symbol	S7160	S7160-01	Unit
Reverse voltage	V_R Max.	5	5	V
Operating temperature	T_{opr}	-20 to +50	-40 to +50	°C
Storage temperature	T_{stg}	-55 to +50	-55 to +50	°C

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

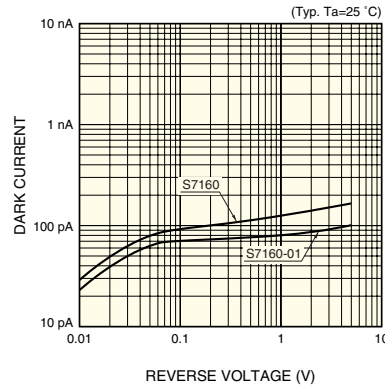
Parameter	Symbol	Condition	S7160		S7160-01		Unit
			Typ.	Max.	Typ.	Max.	
Spectral response range	λ		380 to 780	-	380 to 780	-	nm
Peak sensitivity wavelength	λ_p		555	-	555	-	nm
Photo sensitivity	S	$\lambda = \lambda_p$	0.24	-	0.22	-	A/W
Short circuit current	I_{sc}	100 lx, 2856 K	3.8	-	0.5	-	μ A
Dark current	I_D	$V_R = 10$ mV	50	500	10	50	pA
Terminal capacitance	Ct	$V_R = 0$ V, f = 10 kHz	1100	-	150	-	pF

Spectral response



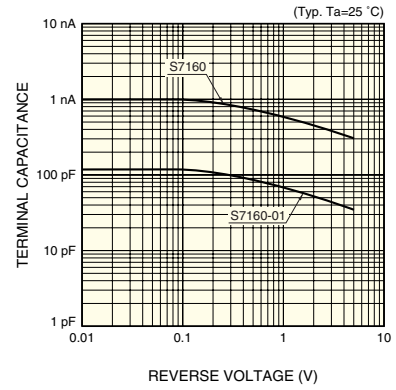
KSPDB0161EA

Dark current vs. reverse voltage



KSPDB0162EA

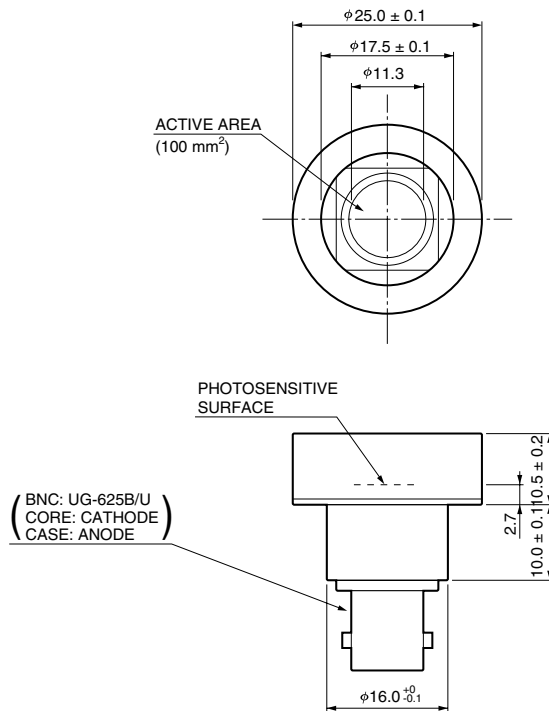
Terminal capacitance vs. reverse voltage



KSPDB0163EA

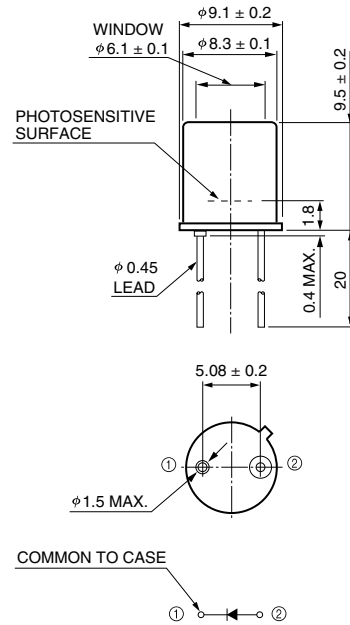
Dimensional outline (unit: mm)

S7160



KSPDA0077EA

S7160-01



KSPDA0078EA

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 Trappu, 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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