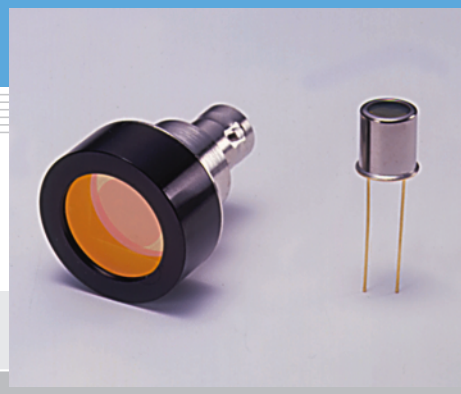


Si photodiode S7160 series

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

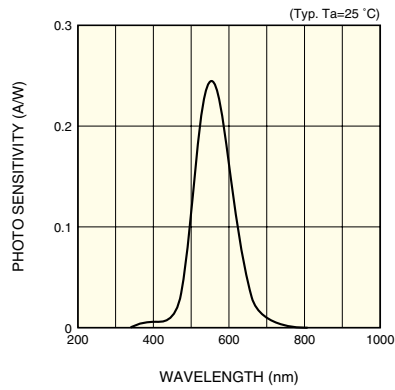
■ Absolute maximum ratings

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)

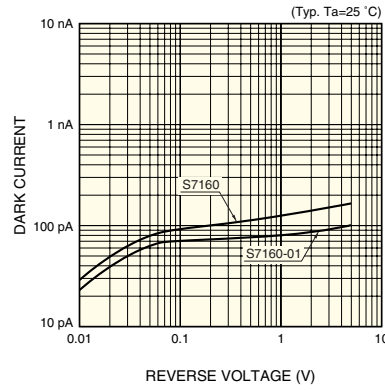
Parameter	Symbol	Condition	S7160		S7160-01		Unit
			Typ.	Max.	Typ.	Max.	
Spectral response range	λ		380 to 780	-	380 to 780	-	nm
Peak sensitivity wavelength	λ_p		555	-	555	-	nm
Photo sensitivity	S	$\lambda = \lambda_p$	0.24	-	0.22	-	A/W
Short circuit current	I_{sc}	100 lx, 2856 K	3.8	-	0.5	-	μ A
Dark 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



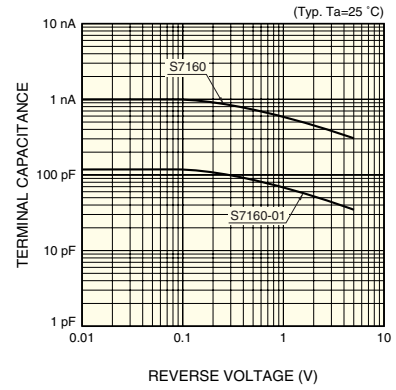
KSPDB0161EA

Dark current vs. reverse voltage



KSPDB0162EA

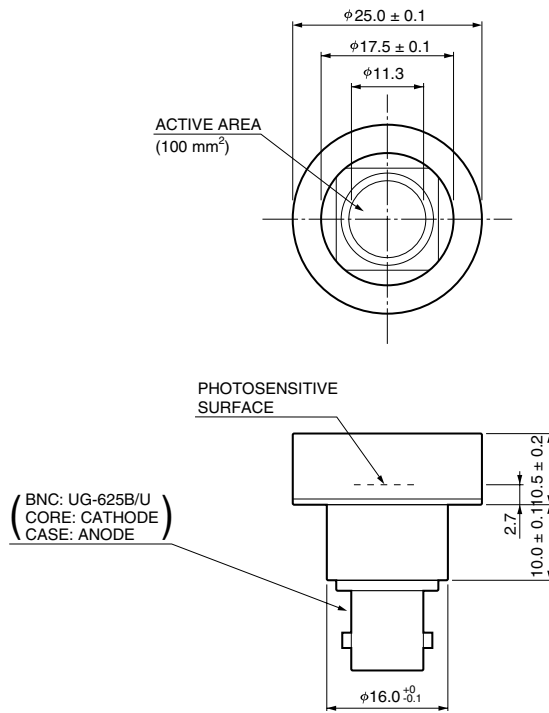
Terminal capacitance vs. reverse voltage



KSPDB0163EA

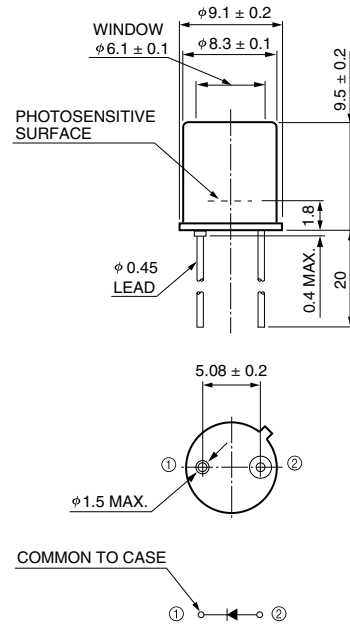
Dimensional outline (unit: mm)

S7160



KSPDA0077EA

S7160-01



KSPDA0078EA

HAMAMATSU

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