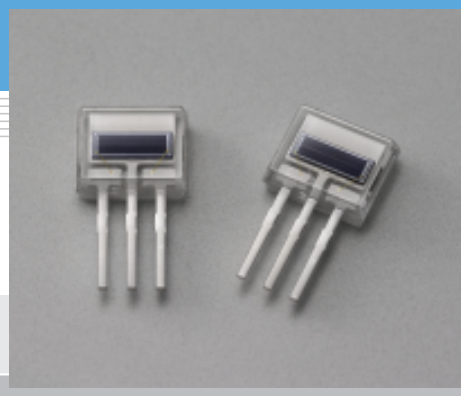


One-dimensional PSD

S8673

One-dimensional PSD using SIP (Single Inline Package)



S8673 is a one-dimensional PSD with a 1.0×3.0 mm active area, molded into a SIP (Single Inline Package).

Features

- Thin, miniature plastic package (SIP style)
- Active area: 1.0×3.0 mm (resistance length 3.0 mm)

Applications

- Optical switches
- Displacement meters

■ Absolute maximum ratings (Ta=25 °C)

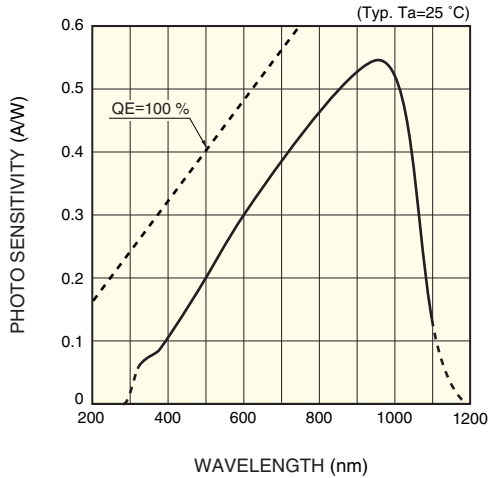
Parameter	Symbol	Value	Unit
Reverse voltage	V _R Max.	20	V
Operating temperature	T _{opr}	-25 to +85	°C
Storage temperature	T _{stg}	-40 to +100	°C

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	320 to 1100	-	nm
Peak sensitivity wavelength	λ_p		-	960	-	nm
Photo sensitivity	S	$\lambda=890$ nm	-	0.5	-	A/W
Position detection error	-	V _R =1 V, *	-	±10	±30	μm
Interelectrode resistance	R _{ie}	V _b =0.1 V	100	140	180	kΩ
Dark current	I _D	V _R =1 V	-	0.05	1	nA
Temperature coefficient of I _D	T _{CID}		-	1.15	-	times/°C
Rise time	t _r	V _R =1 V, R _L =1 kΩ $\lambda=650$ nm	-	3	-	μs
Terminal capacitance	C _t	V _R =1 V, f=10 kHz	-	15	30	pF
Saturation photocurrent	I _{st}	V _R =1 V, R _L =1 kΩ	30	-	-	μA

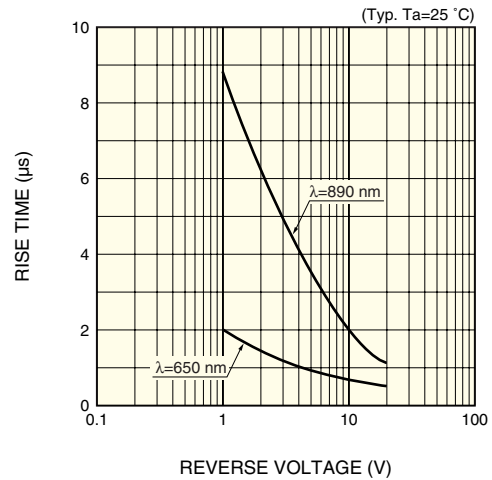
* In the range 75 % from the center of the active area to the edge.

■ Spectral response



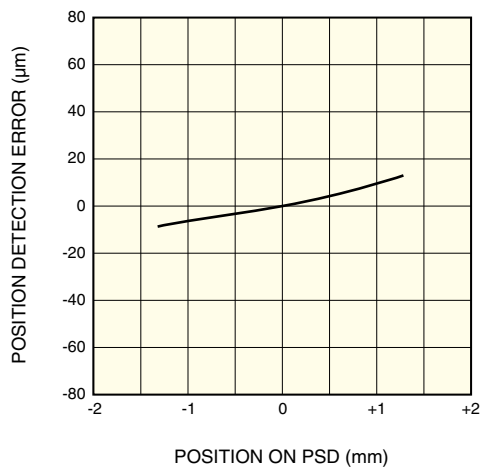
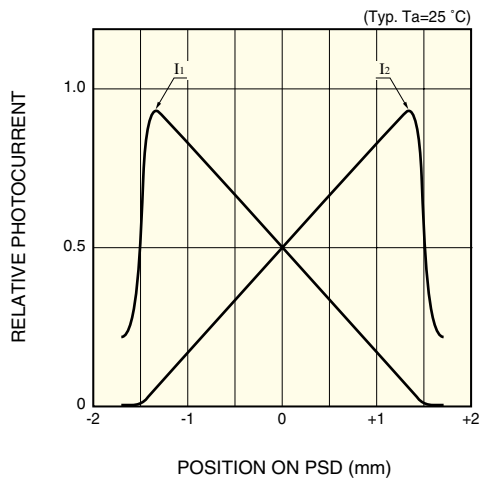
KPSDB0104EA

■ Rise time vs. reverse voltage



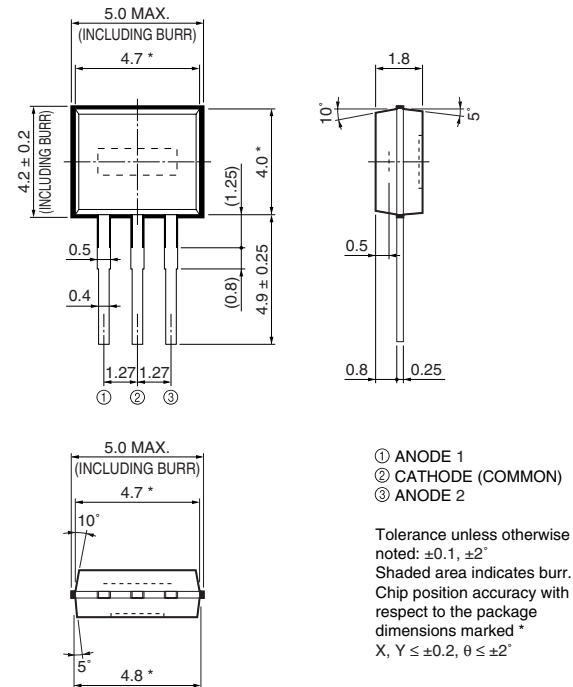
KPSDB0105EA

■ Position detection characteristic example



KPSDB0106EA

■ Dimensional outline (unit: mm)



KPSDA0061EA

HAMAMATSU

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