PD663PS/PD666PS 6-division photodiodes

■ Features

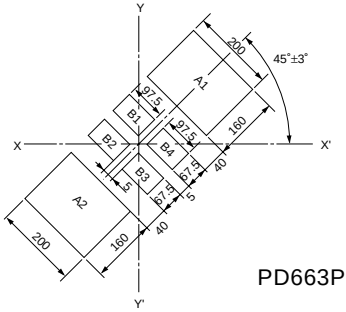
1. For 3 beams(6-division photodiodes)
2. With non-reflective layer
3. Transparent transfer molded package

■ Applications

1. Optical pick-up for CD player

Enlarged Figure of Light Detecting Portion

(Unit: μm)



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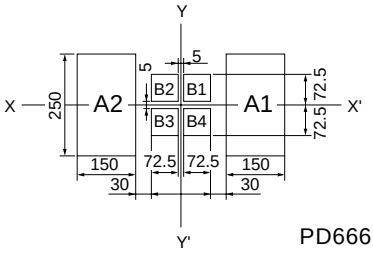

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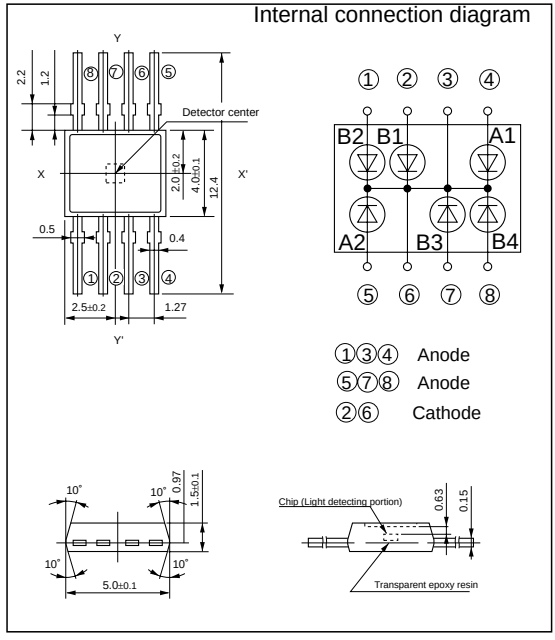
■ Outline Dimensions

(Unit: mm)



■ Absolute Maximum Ratings

(Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Reverse voltage	V_R	30	V
Operating temperature	T_{opr}	-25 to +85	˚C
Storage temperature	T_{stg}	-40 to +85	˚C
*1 Soldering temperature	T_{sol}	260	˚C

*1 For MAX. 3 seconds at the position of 1.0mm from the resin edge

■ Absolute Maximum Ratings

(Ta=25˚C)

Parameter		Symbol	Conditions	*6	MIN.	TYP.	MAX.	Unit
*2 *3 Short circuit current	PD663PS	I_{SC}	E_V=1000 lx *4	A	340	490	640	nA
				B	80	120	160	nA
	PD666PS			A	400	570	740	nA
				B	70	100	130	nA
Reverse voltage		V_R	I_R=10mA	A,B	30	-	-	V
*5 Dark current		I_d	V_R=15V	A	-	-	300	pA
				B	-	-	200	pA
Terminal Capacitance		C_t	V_R=15V f=1MHz	A	-	3	-	pF
				B	-	2	-	pF
Peak sensitivity wavelength		λ_P		A,B	-	840	-	nm
Cut-off frequency		f_C	V_R=15V,R_L=50Ω Output: -3dB at 500 kHz	A	-	35	-	MHz
				B	-	35	-	MHz
Sensitivity		S	λ=780nm	A,B	0.45	0.55	0.65	A/W

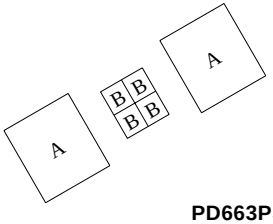
*2 Values in each element. Elements other than subject elements shall be measured while the anode and the cathode are short-circuited to each other.

*3 Short-circuit currents at two segments on both ends and four segments on the center of the element shall be within ±10% of the average.

*4 Ev:Illuminance by CIE standard light source A(tungsten lamp)

*5 Values in each element.

*6 Like signs represent like elements in the light detector.



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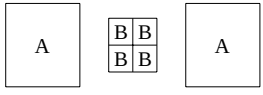

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Fig.1 Power Dissipation vs. Ambient Temperature

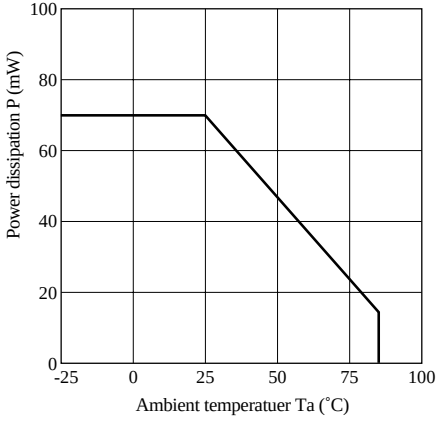

Fig.2 Spectral Sensitivity

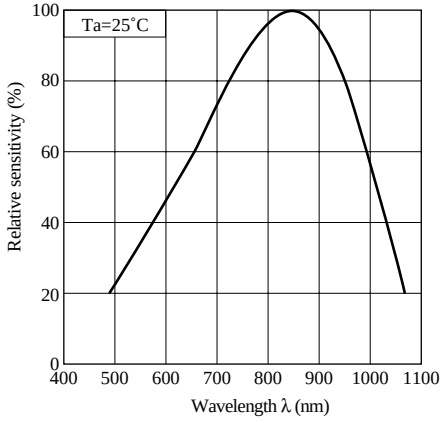

FIG. 3 Dark Current vs. Ambient Temperature

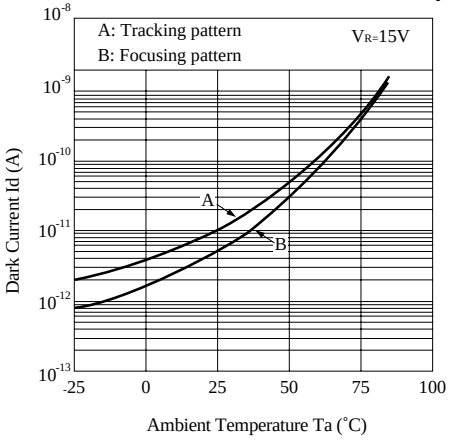

Fig.4 Dark Current vs. Reverse Voltage

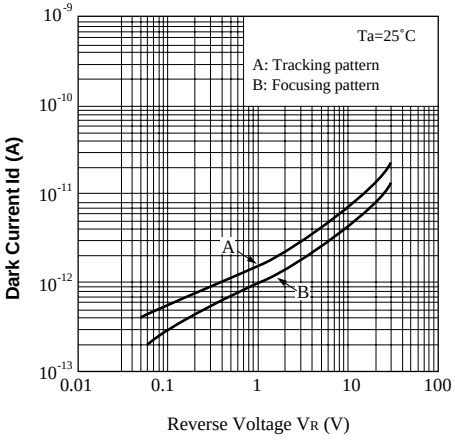

Fig.5 Terminal Capacitance vs. Reverse Voltage

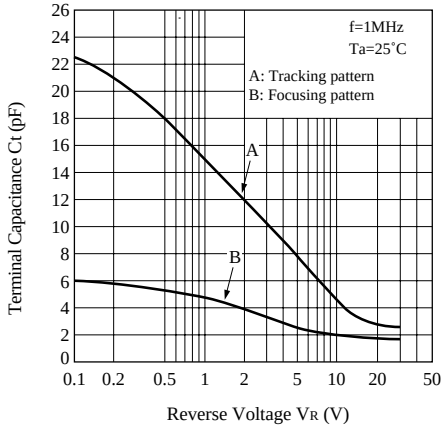

Fig.6 Relative Sensitivity vs. Ambient Temperature

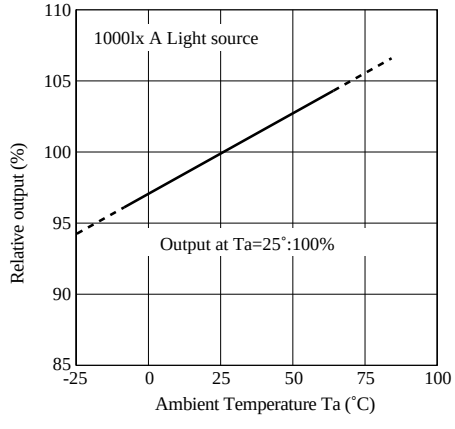

Fig.7 Responce Time vs. Load Resistance

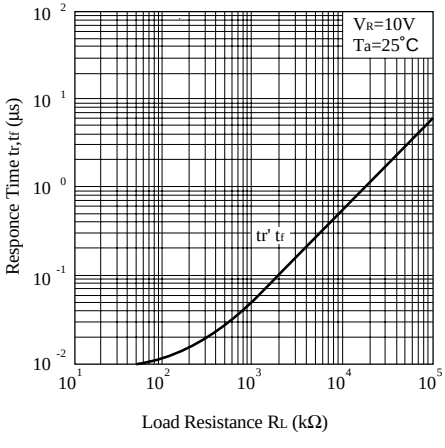

Fig.8 Frequency Response