

PD663PS/PD666PS

6-division photodiodes

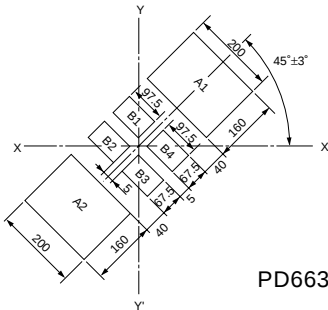
Features

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

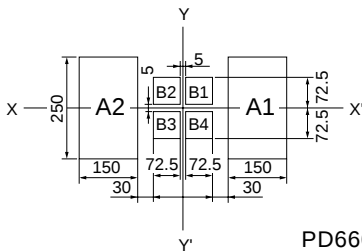
Applications

1. Optical pick-up for CD player

Enlarged Figure of Light Detecting Portion
(Unit: μm)



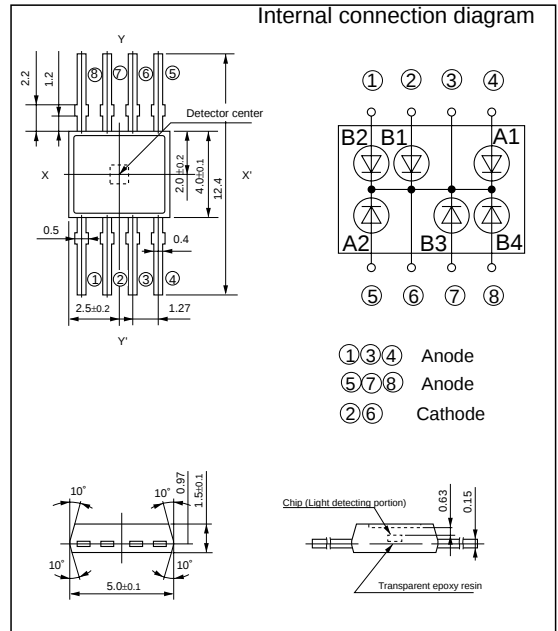
PD663PS



PD666PS

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
	PD666PS			B	80	120	160	nA
				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 E_V:Illuminance by CIE standard light source A(tungsten lamp)

*5 Values in each element.

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

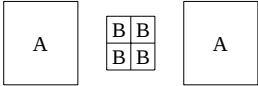
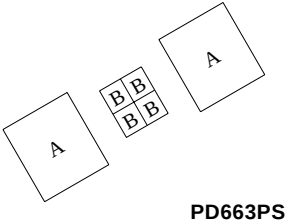


Fig.1 Power Dissipation vs. Ambient Temperature

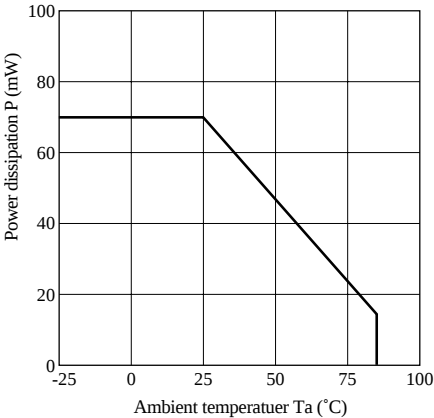


Fig.2 Spectral Sensitivity

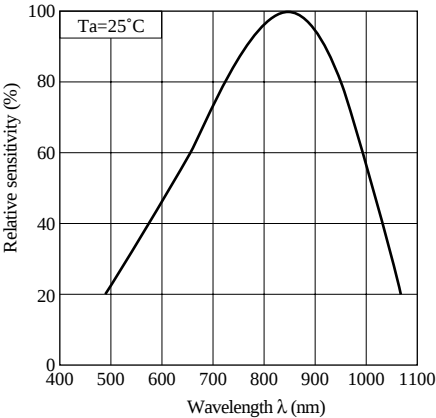
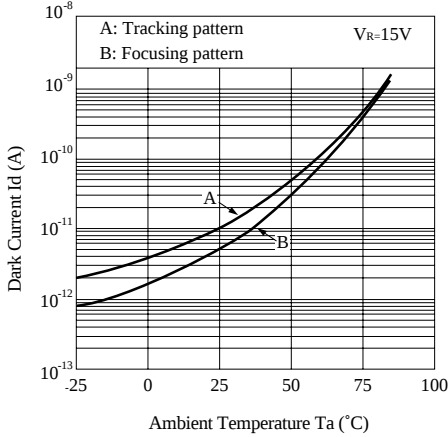
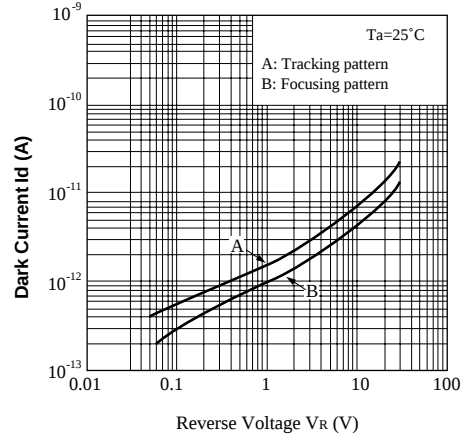
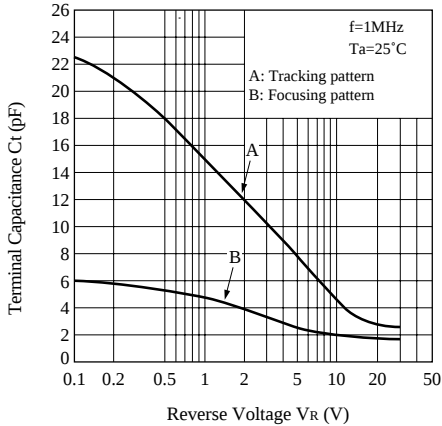
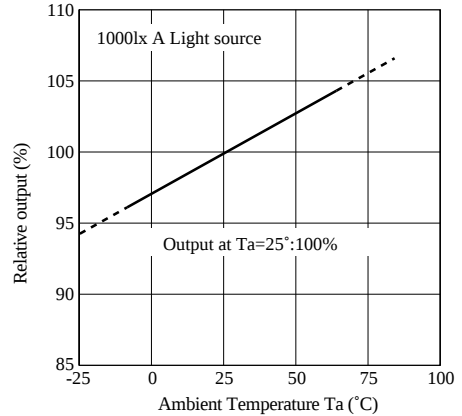
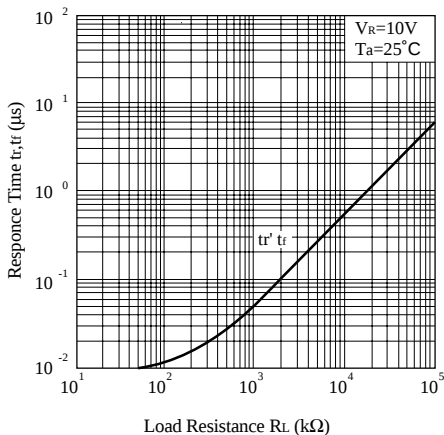


Fig. 3 Dark Current vs. Ambient Temperature**Fig. 4 Dark Current vs. Reverse Voltage****Fig. 5 Terminal Capacitance vs. Reverse Voltage****Fig. 6 Relative Sensitivity vs. Ambient Temperature****Fig. 7 Response Time vs. Load Resistance****Fig. 8 Frequency Response**