

PD322PI 2-division Chip Type Photodiode

T-41-53

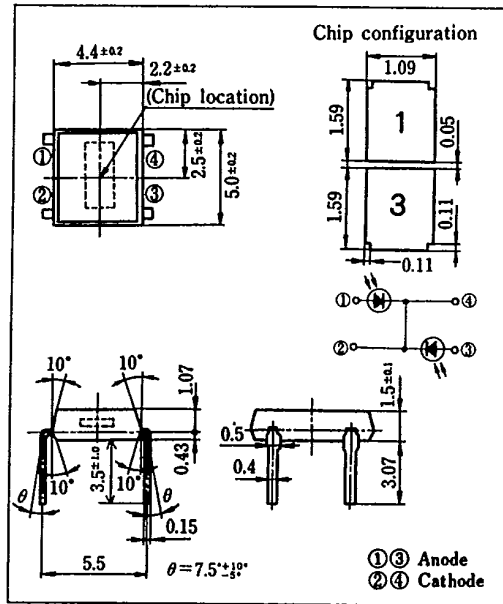
Features

1. 2-division chip type
2. Peak sensitivity wavelength λ_p : 980nm
3. Transparent transfer mold package

Applications

1. VCR cameras
2. Cameras

Outline Dimensions (Unit : mm)



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Power dissipation	P	100	mW
Operating temperature	T_{OPR}	-25 ~ +80	°C
Storage temperature	T_{STG}	-40 ~ +80	°C
*1 Soldering temperature	T_{SOL}	260	°C

*3 For 3 seconds at the position of 1mm from the bottom face of resin package

Electro-optical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
*2 Short circuit current	I_{sc}	*3 $E_v = 100 \text{ lx}$	1.2	1.7	2.2	μA
Dark current	I_d	$V_R = 10\text{V}$	—	—	20	nA
Terminal capacitance	C_t	$V_R = 10\text{V}, f = 1\text{MHz}$	—	5	15	pF
Peak sensitivity wavelength	λ_p		930	980	1,010	nm
Response time	t_r, t_f	$V_R = 10\text{V}, R_L = 1\text{k}\Omega$	—	70	—	ns

*2 Values for 1 element. Measured with short-circuit between the anode and the cathode of non-measurement elements.

*3 E_v : Illuminance by CIE standard light source A (tungsten lamp)

Fig. 1 Power Dissipation vs. Ambient Temperature

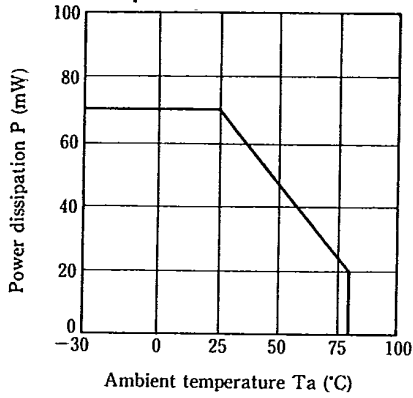


Fig. 2 Spectral Sensitivity T-41-53

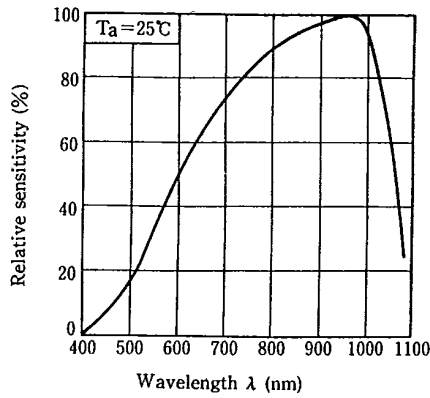


Fig. 3 Dark Current vs. Ambient Temperature

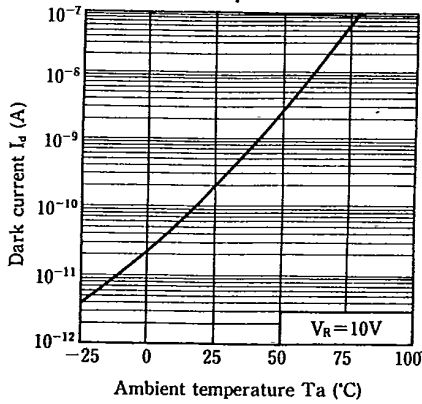
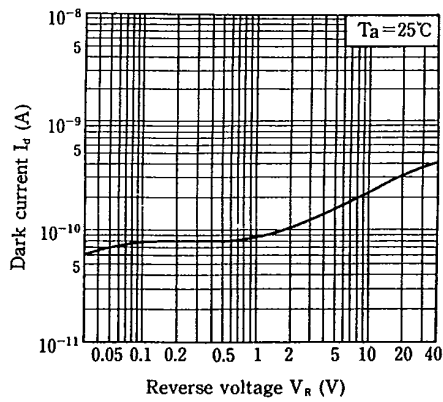


Fig. 4 Dark Current vs. Reverse Voltage



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Fig. 5 Terminal Capacitance vs. Reverse Voltage

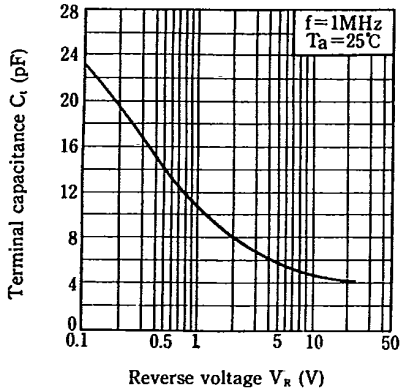


Fig. 6 Relative Output vs. Ambient Temperature

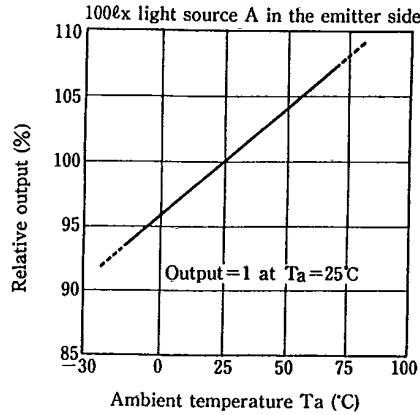
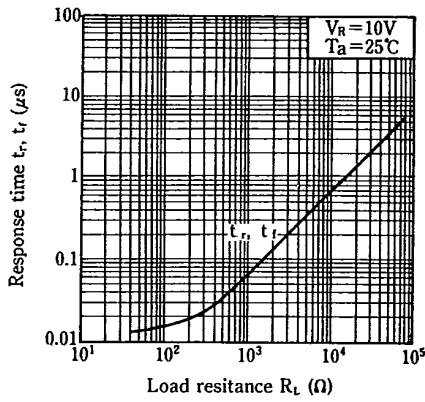


Fig. 7 Response Time vs. Load Resistance



Test Circuit for Response Time

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