

Specification for Approval

● Feature

- Medium beam angle ($\pm 60^\circ$)
- top looking package
- Capable of pulse operation
- Low profile
- Low cost
- Active area $\varnothing 300 \mu\text{m}$

Photo:

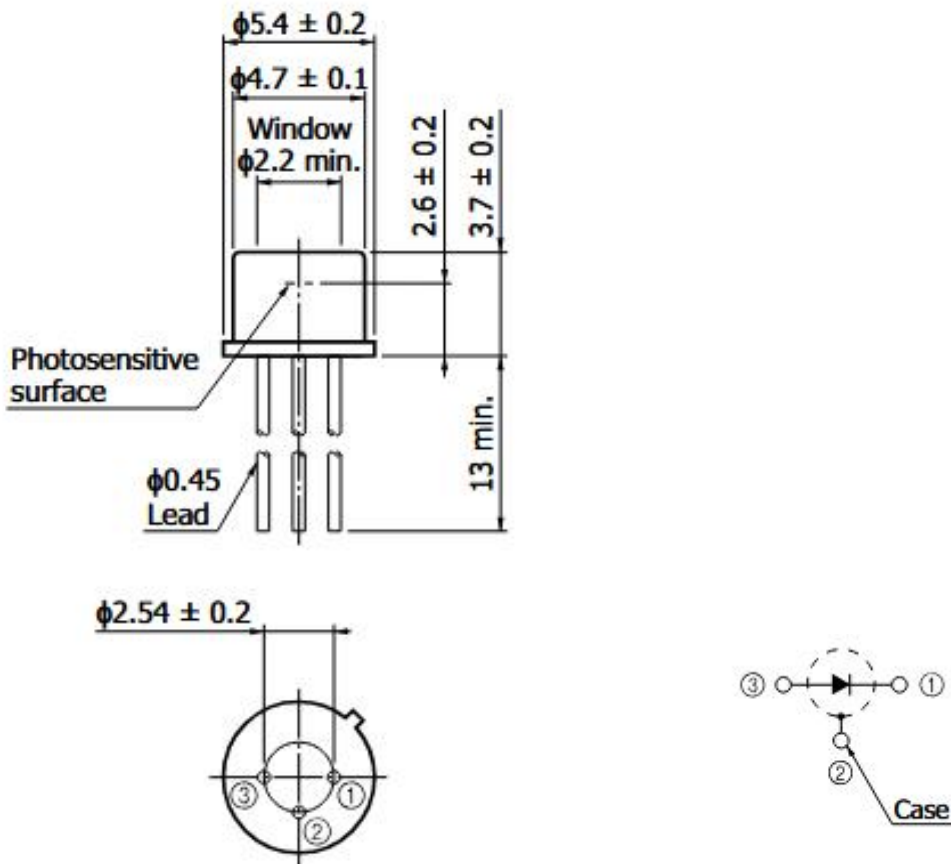


● ■ Applications

- Remote control sensors
- Card readers
- Optical switches
- High speed photo detector
- VCRs , Video camera
- Medical Instruments and Equipment

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■ Package Dimension :



■ Notes :

- 1.All dimensions are in millimeter.Protruded resin under flange 1.0mm Max.
- 2.3.Lead spacing is measured where the lead emerge from the package.
- 4.When using this product , please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. Sealand assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
- 5.Above specification may be changed without notice. we will reserve authority on material change for above specification.

Specification for Approval

■ Absolute Maximum Ratings at T_A = 25°C

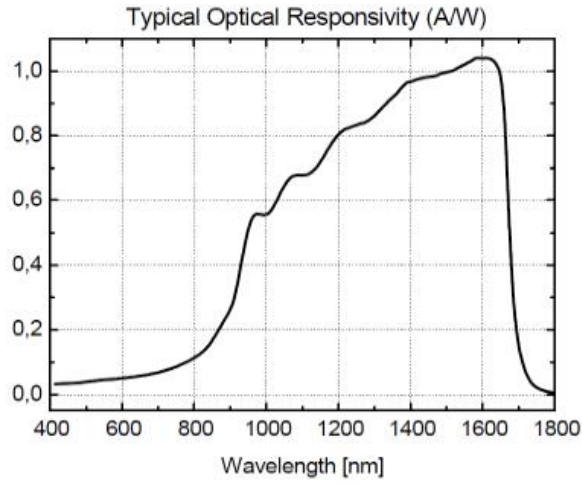
Parameter	Symbol	Rating	Unit	Notice
Reverse Voltage	VR	20	v	
Power Dissipation	Pd	150	mW	
Lead Soldering Temperature	Tsol	260	°C	4mm from mold body less than 5 seconds
Operating Temperature	Topr	-45 ~+85	°C	
Storage Temperature	Tstg	-40 ~ +85	°C	

■ Electronic Optical Characteristics : (Ta=25°C)

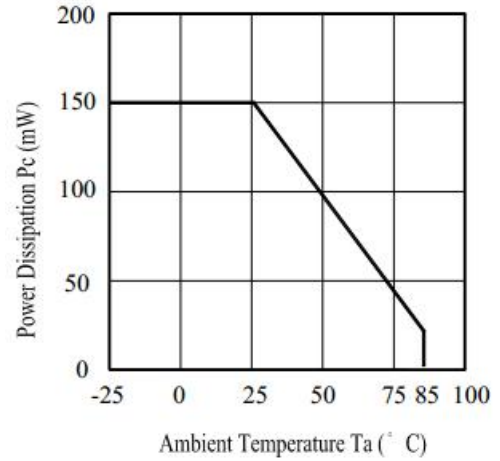
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Response range	λ	800		1700	nm	
Responsivity	R		0.9	1.0		$\lambda = 1310\text{nm}$
			0.95	1.1		$\lambda = 1550\text{nm}$
			0.1		A/W	$\lambda = 850\text{nm}$
Capacitance	C			20	pF	VR=-0V, f= 1MHz
Bandwith	Bw			1.8	GHz	3dB down, RL=50Ω
Rise/Fall Time	tr/tf	---		4.5/5	nS	RL=100 VR=10V
Breakdown voltage	VR	5			V	Ir =10 μA
Shunt resistance	R _{SH}			3000	MΩ	VR =10 mV
Dark current	Id		0.3		nA	VR=5 V@25 °C
Noise equivalent power	NEP		4x10 ⁻¹⁴		w/ √ HZ	$\lambda = 1300\text{ nm}$
Specific detectivity	D		5x10 ¹²		w/ √ HZ*w ⁻¹	$\lambda = 1300\text{ nm}$

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Typical Electrical/Optical/Characteristics Curves

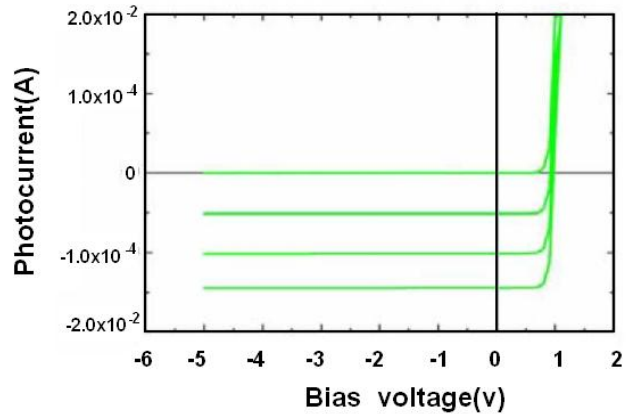
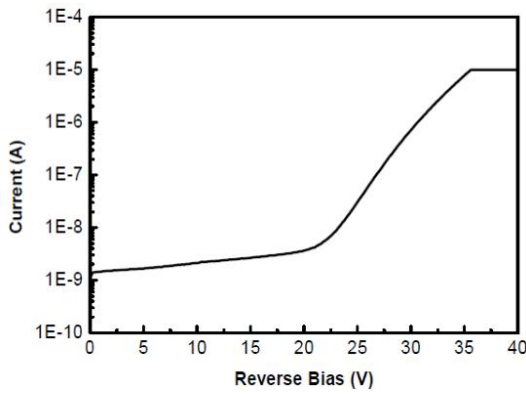


Power Dissipation vs. Ambient Temperature

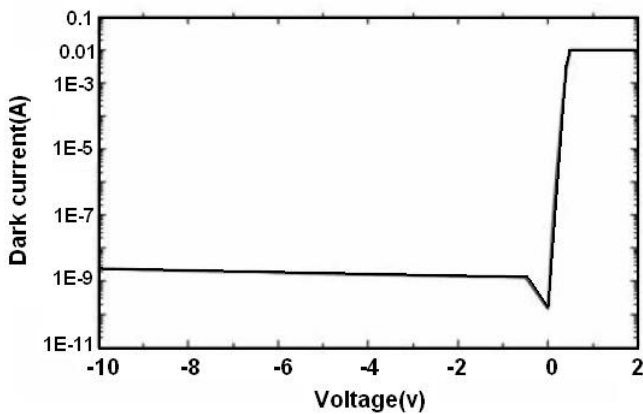


Typical Breakdown Curve

Typical Photo-current



typical Dark current and Forward Current



Typical C-V curve

