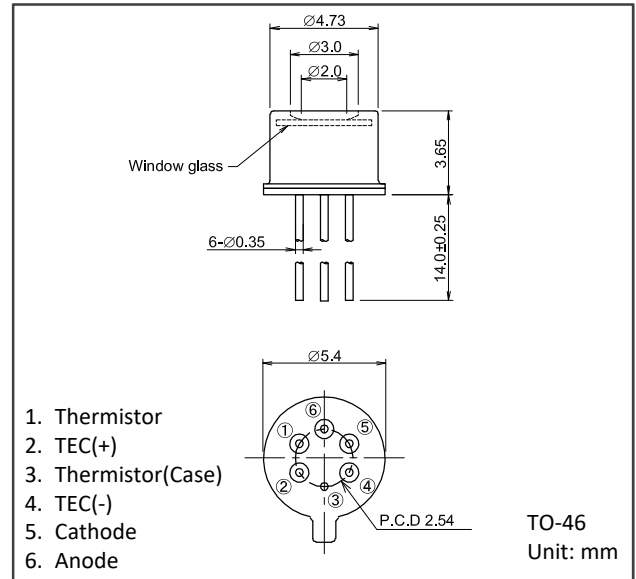


### Features

- 860 $\mu\text{m}$  sq. large sensitive area
- Low dark current
- High shunt resistance
- Electrically cooled with TEC and thermistor
- Small size (TO-46 package)

### Applications

- Near IR sensors
- Near IR spectroscopy
- Power meters



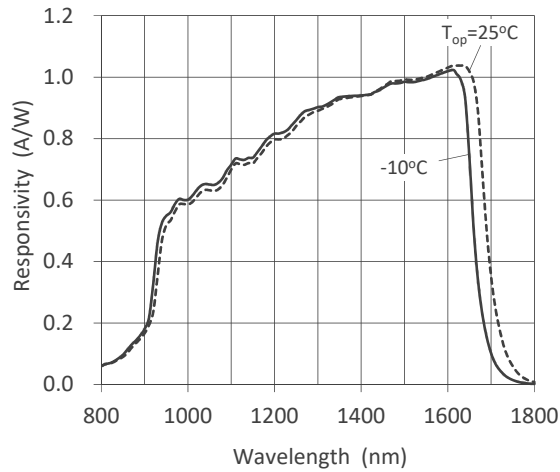
### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Note
Reverse voltage	$V_R$	20	V	
Maximum optical power input	$P_{i(max)}$	50	mW	
Power dissipation	$P_D$	100	mW	
Forward current	$I_F$	50	mA	
TEC current	$I_C$	1.0	A	
Thermistor power rating	$P_{th}$	1.5	mW	
Operating temperature	$T_{opr}$	-40 to +70	$^{\circ}\text{C}$	Avoid dew condensation
Storage temperature	$T_{stg}$	-40 to +85	$^{\circ}\text{C}$	Avoid dew condensation

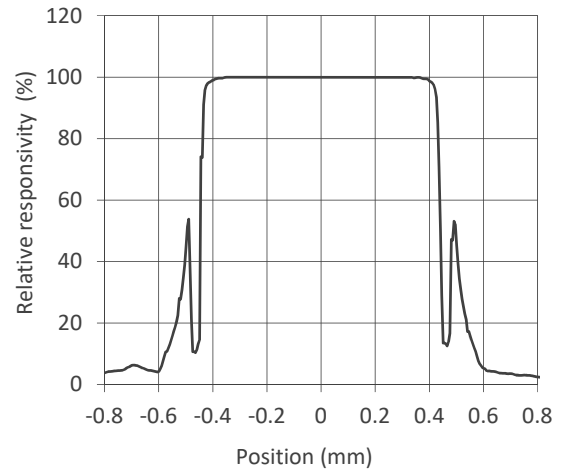
### Electrical and Optical Characteristics (Ta=25 $^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Active area	S	860 x 860			$\mu\text{m}^2$	
Resonsivity	R	0.8	0.9	-	A/W	$\lambda=1310\text{nm}$
		0.9	1.0	-	A/W	$\lambda=1550\text{nm}$
Dark current	$I_D$	-	1.0	10	nA	$V_R=5\text{V}$
Terminal capacitance	$C_t$	-	45	60	pF	$V_R=5\text{V}, f=1\text{MHz}$

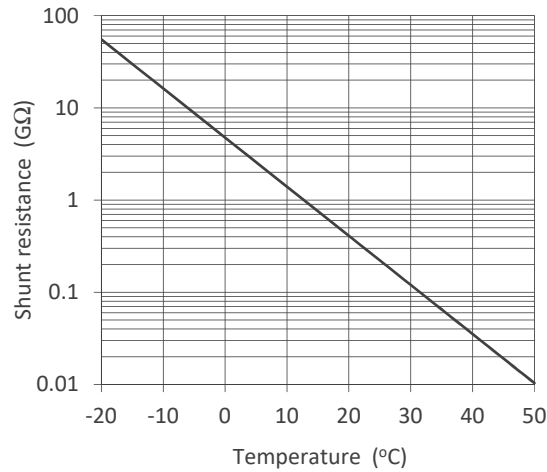
**Spectral Responsivity**



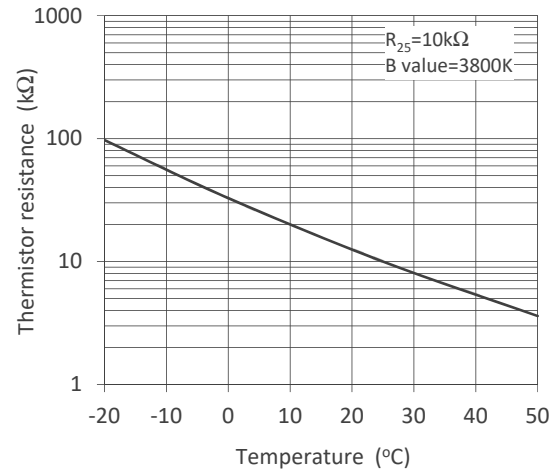
**Responsivity Distribution**



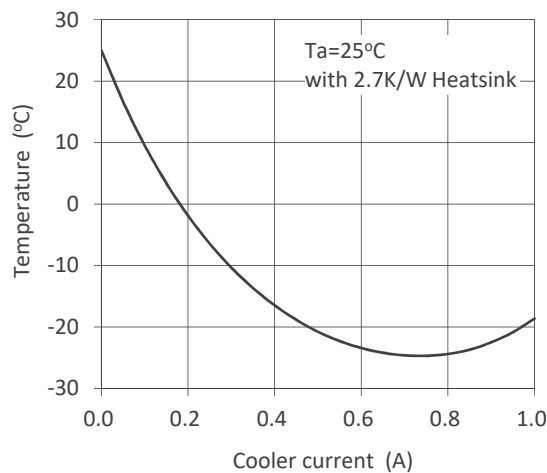
**Shunt Resistance - Temperature**



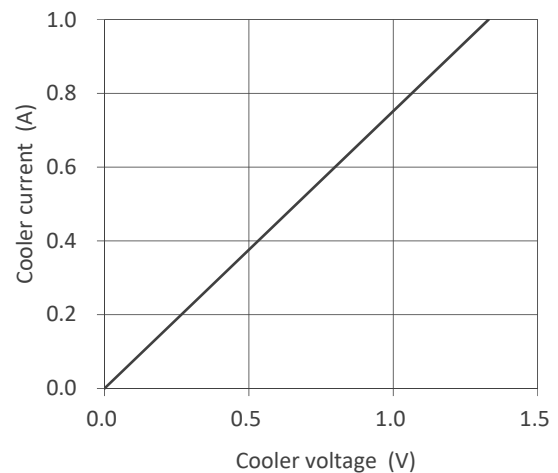
**Thermistor Resistance - Temperature**



**TEC Temperature - Current**



**TEC Current - Voltage**



- Specifications , characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (2011/65/EU).



**Opto-technologies for the Future**

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