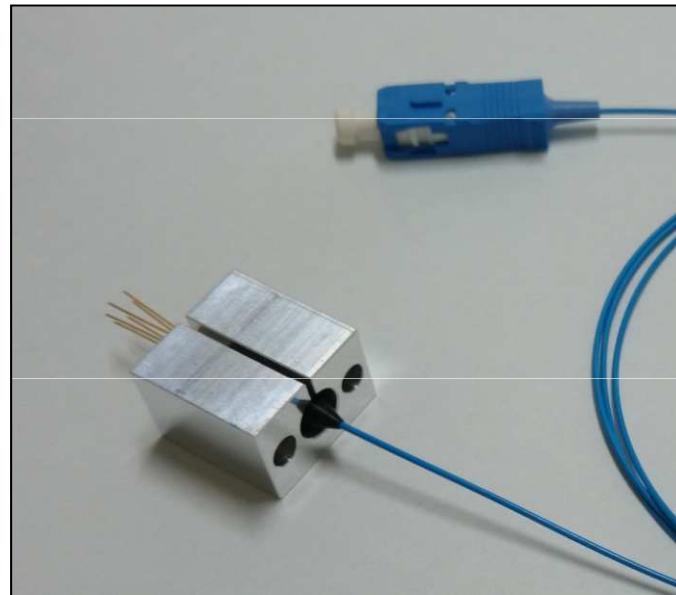


Preliminary

Description

- With TEC and a thermistor
- Cooling ability $\Delta T \geq 40^\circ\text{C}$
- Low dark current
- With a heat sink
- Pigtail

**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Forward current	I_F	3	mA	
Reverse current	I_R	3	mA	
TEC current	I_C	1	A	
Thermistor Allowable power dissipation	P_{th}	1.5	mW	
Operating temperature	T_{opr}	-40 to +85	°C	Avoid dew condensation
Storage temperature	T_{stg}	-40 to +85	°C	Avoid dew condensation

Electrical and Optical Characteristics (Ta=25degC unless otherwise noted)

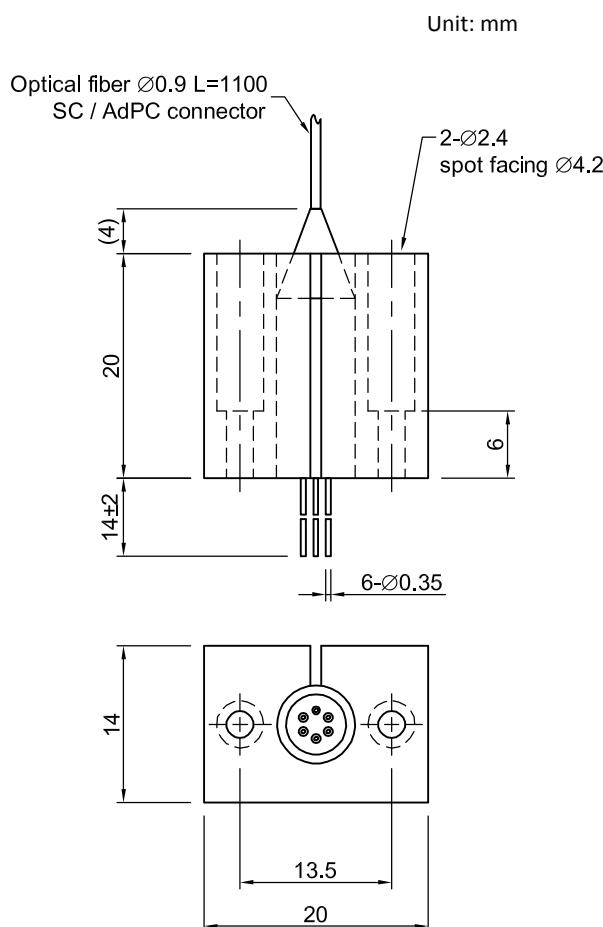
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Bandwidth	BW	2.5	-	-	GHz	$V_R = V_B \times 0.9$
Responsivity	R	0.85	0.95	-	A/W	$\lambda = 1310\text{nm}, M=1$
		0.90	1.00	-		$\lambda = 1550\text{nm}, M=1$
Dark current	I_D	-	-	10	nA	$V_R = V_B \times 0.9$
Breakdown voltage	V_B	40	50	60	V	$I_D = 10\mu\text{A}, P_{in} = -\infty$
Temperature coefficient of V_B	$\Delta V_B / \Delta T$	0.11	-	0.15	V/°C	$I_D = 10\mu\text{A}, P_{in} = -\infty$
Chip capacitance	C_{chip}	-	0.38	0.50	pF	$V_R = V_B \times 0.9$
Total capacitance	C_t	-	0.68	0.80	pF	$V_R = V_B \times 0.9$
Cooling ability	ΔT	40	-	-	°C	$I_C = 0.5\text{A}$

Pigtail

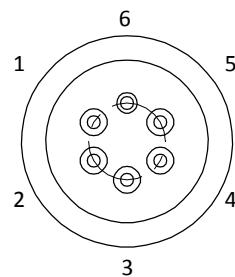
Parameter		Unit	Note
Fiber type	Single-mode fiber	-	$\Phi 0.9\text{mm}$
Fiber length	1100 ± 100	mm	Include Connector
Connector	SC connector	-	AdPC

Preliminary

Drawings



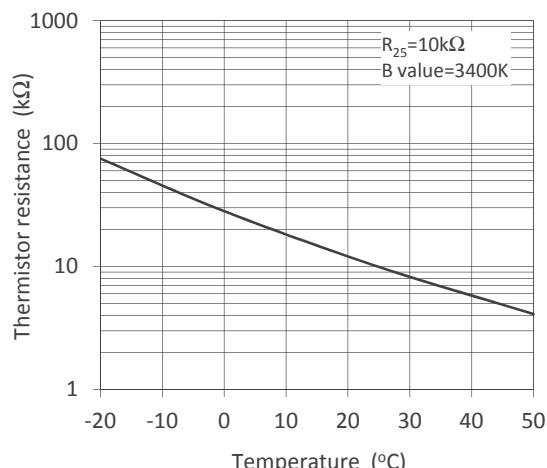
Pin assignment



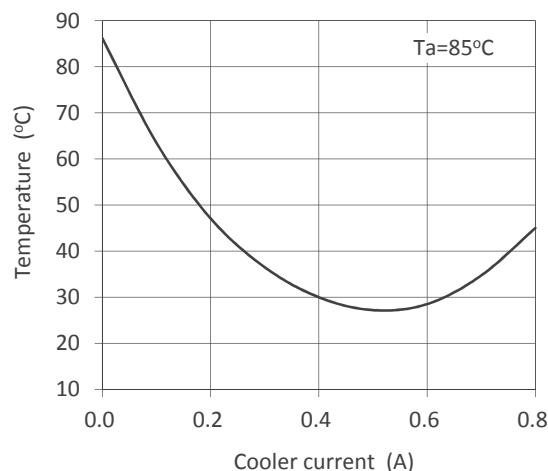
Pin	Function
1	Peltier(-)
2	APD Anode
3	APD Cathode
4	Thermistor
5	Peltier(+)
6	Thermistor, Case

Bottom view

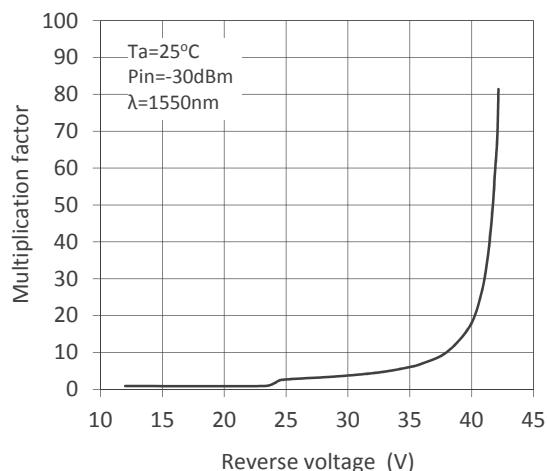
Thermistor Resistance - Temperature



TEC Temperature - Current



Multiplication Factor



- 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 (EU2002/95/EC).