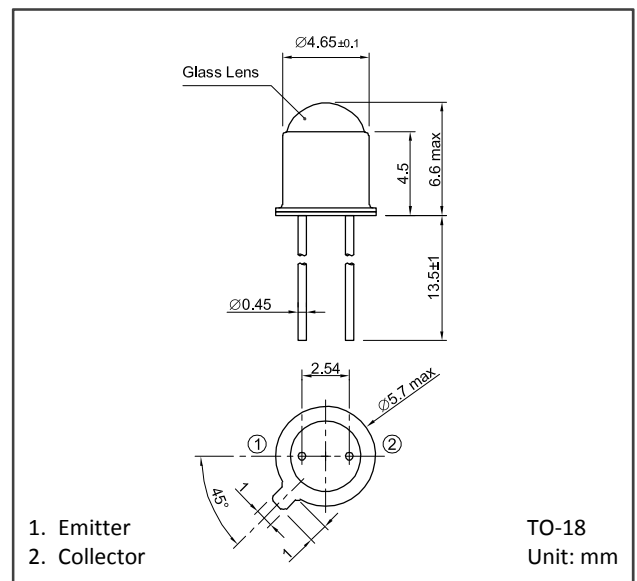


**Features**

- NPN phototransistor packaged in a 2 leads TO-18
- Hermetic seal with a glass lens
- Low leak current

**Applications**

- Optical switches
- Optical encoders
- Photo-isolators
- Camera stroboscopes
- Infrared sensors
- Automatic control apparatus

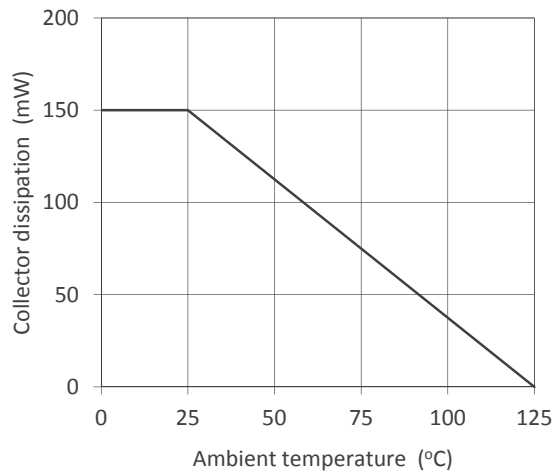
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Collector-emitter voltage	$V_{ce0}$	20	V	
Emitter-collector voltage	$V_{eco}$	5	V	
Operating temperature	$T_{opr}$	-25 to +125	°C	Avoid dew condensation
Storage temperature	$T_{stg}$	-55 to +150	°C	Avoid dew condensation

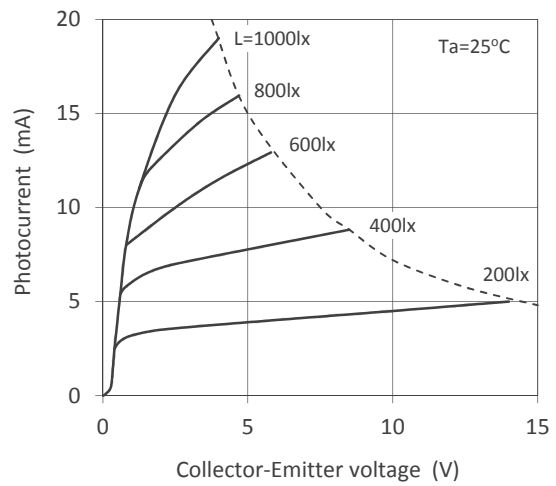
**Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Active area	S	0.64 x 0.64			mm <sup>2</sup>	
Sensitive wavelength	$\lambda$	400	800( $\lambda_p$ )	1000	nm	$\lambda_p$ =Peak wavelength
Photocurrent	$I_L$	-	2	-	mA	$V_{ce}=5V$ , 100lx (@2856K)
Dark current	$I_{ceo}$	-	100	200	nA	$V_{ce}=20V$
Current amplification factor	$h_{FF}$	600	-	-	-	$V_{ce}=5V$ , $I_C=2mA$
Collector-emitter saturation voltage	$V_{ce(sat)}$	-	-	0.4	V	$I_C=0.1mA$ 100lx (@2856K)
Rise / fall time	$t_r, t_f$	-	5	-	$\mu s$	$V_{ce}=5V$ , $I_C=2mA$ , $R_L=100\Omega$
Half angle	$2\theta$	-	17	-	deg.	

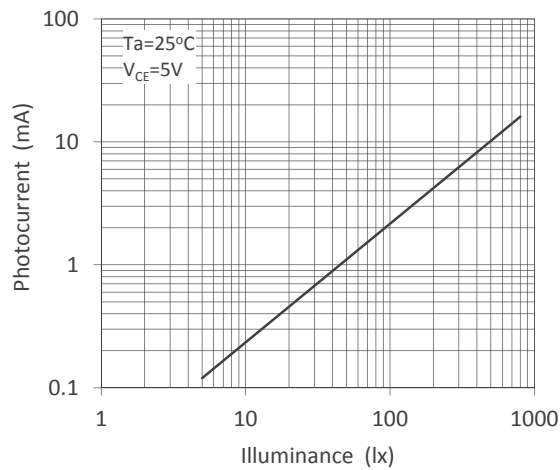
Collector Dissipation - Ambient Temperature



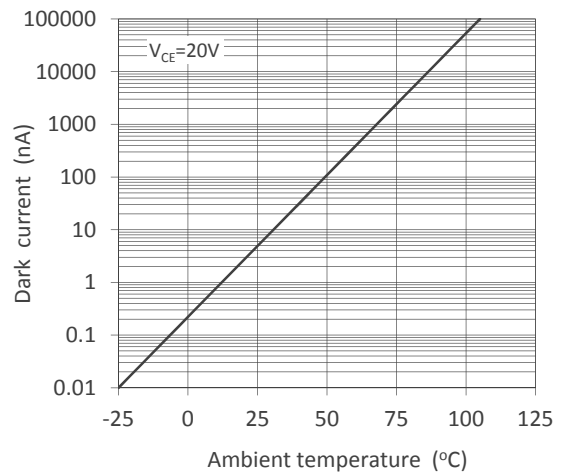
Photocurrent - Collector-Emitter Voltage



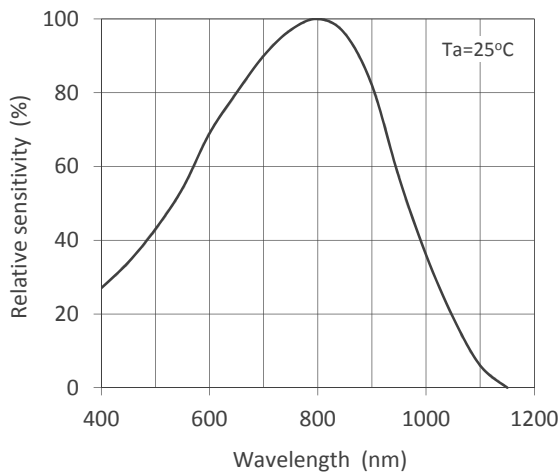
Photocurrent - Illuminance



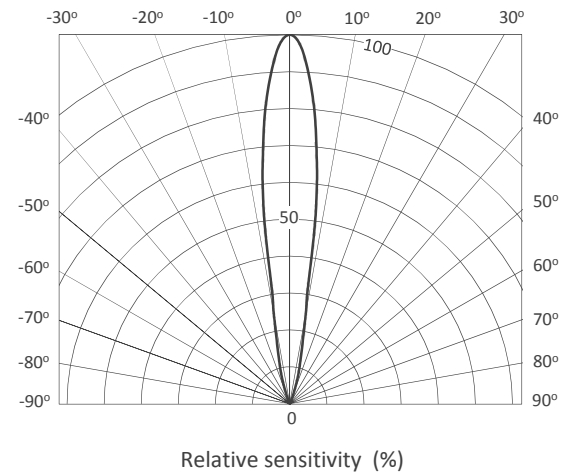
Dark Current - Ambient Temperature



Spectral Responsivity



Directivity



- 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).

**Opto-technologies for the Future**



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