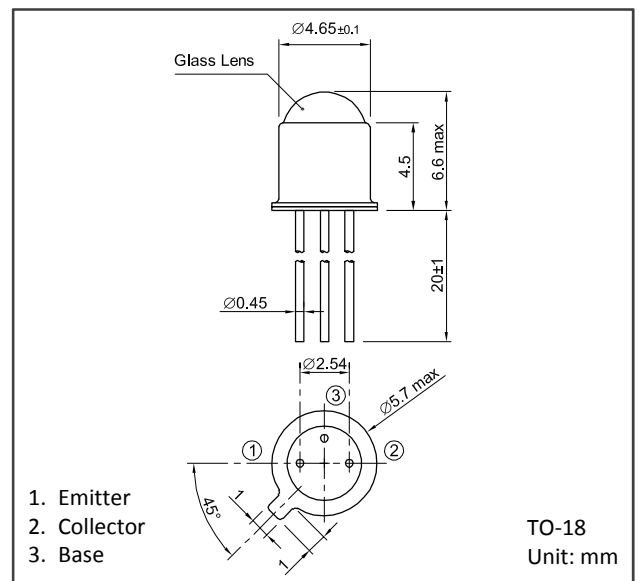


Features

- NPN phototransistor packaged in a 3 leads TO-18 for base connection
- Hermetic seal with a glass lens
- Low leak current

Applications

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

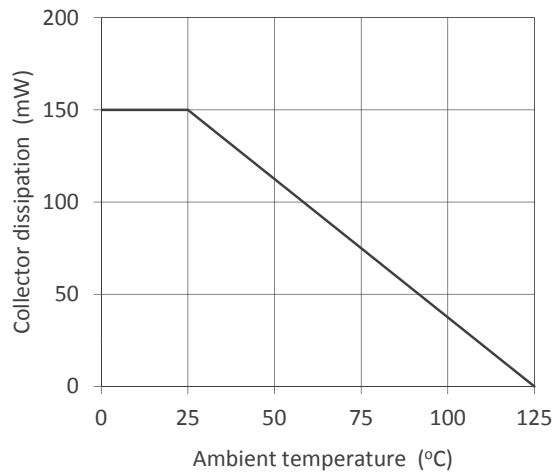
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Collector-emitter voltage	V_{ce0}	20	V	
Emitter-collector voltage	V_{eco}	5	V	
Collector-base voltage	V_{cbo}	30	V	
Emitter-base voltage	V_{ebo}	5	V	
Collector dissipation	P_D	125	mW	
Operating temperature	T_{opr}	-25 to +125	°C	Avoid dew condensation
Storage temperature	T_{stg}	-55 to +150	°C	Avoid dew condensation

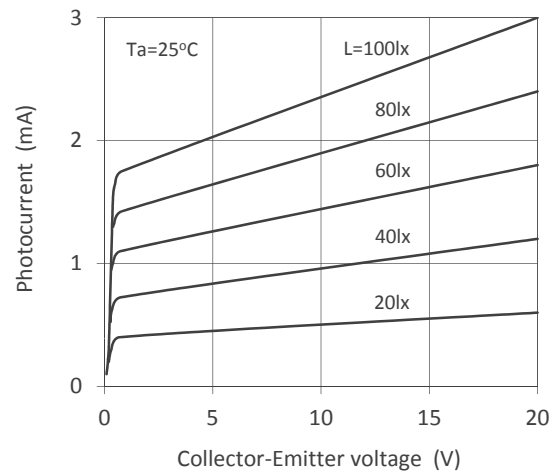
Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Active area	S	0.64 x 0.64			mm ²	
Sensitive wavelength	λ	400	800(λ_p)	1000	nm	λ_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_{FE}	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	-	μs	$V_{ce}=5V$, $I_C=2mA$, $R_L=100\Omega$

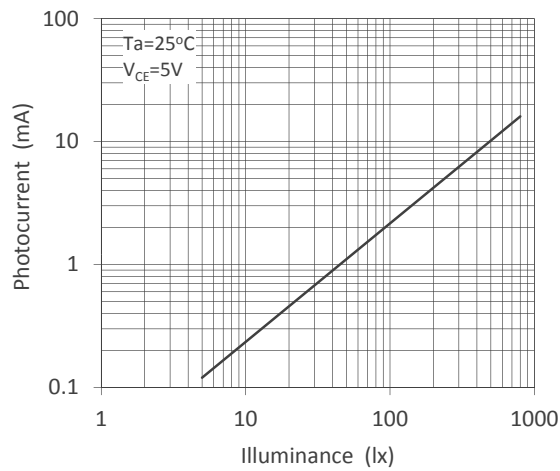
Collector Dissipation - Ambient Temperature



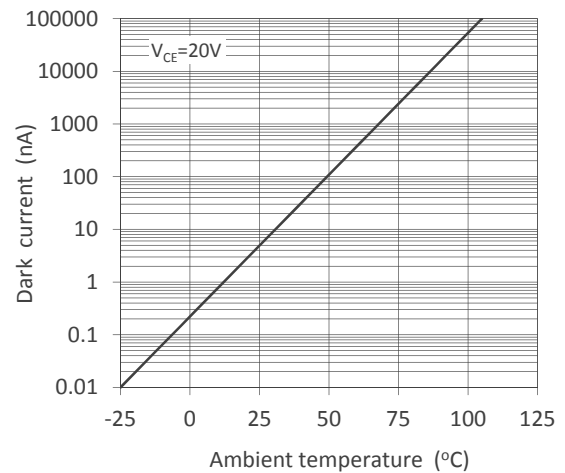
Photocurrent - Collector-Emitter Voltage



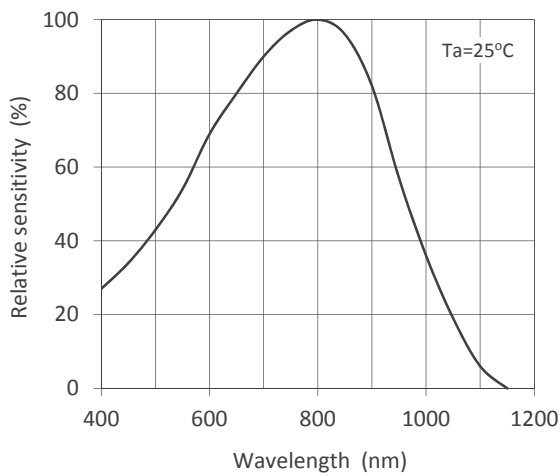
Photocurrent - Illuminance



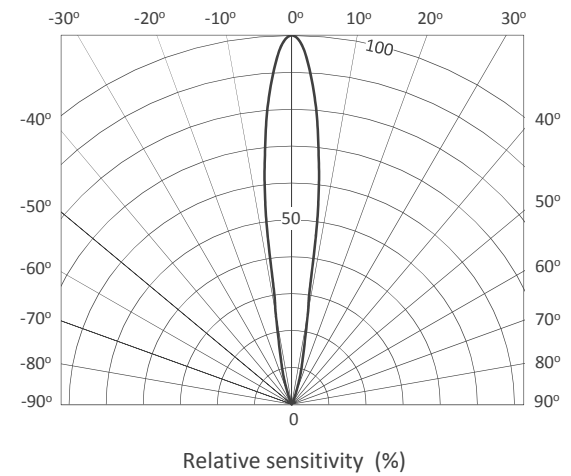
Dark Current - Ambient Temperature



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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