

MODEL 產品型號：XL-PT523B

Features

Fast response time

High linearity

High photo sensitivity

Available in groups

Pb free

The product itself will remain within RoHS compliant version

Descriptions

XL-PT523B is a high speed and high sensitive NPN silicon phototransistor molded in a standard $\Phi 3\text{mm}$ package.

Due to is black epoxy the device is sensitive to visible and infrared radiation.

Applications

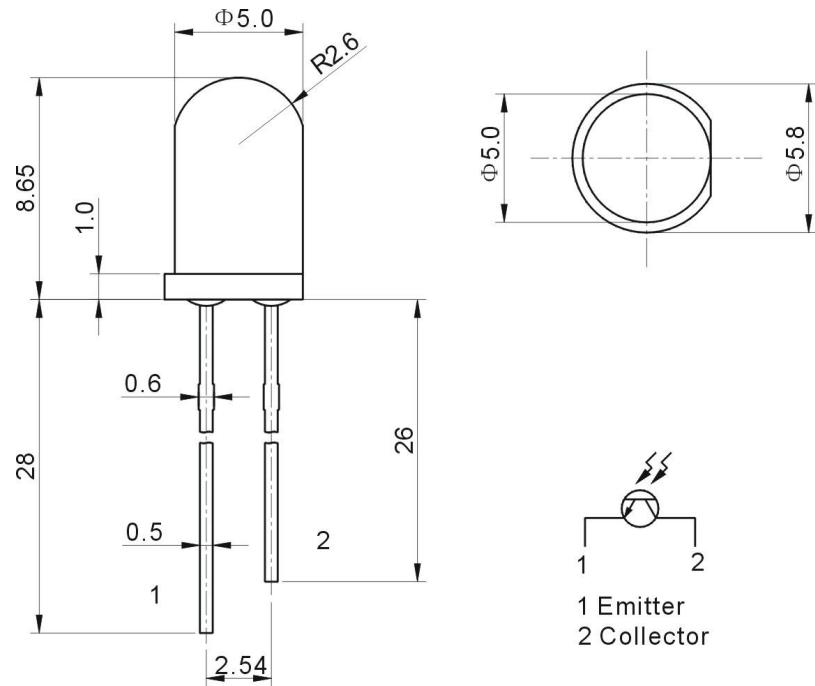
Infrared applied system Optoelectronic switch Camera Printer

Photo interrupters Industrial electronics For control and drive circuits



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Package Dimension



NOTE: TOLERANCE ± 0.5 mm

Notes:

All dimensions are in millimeters.

Tolerances unless dimensions ± 0.25 mm

Lead spacing is measure where the lead emerge from the package.

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Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation at (or below) 25°C Free Air Temperature	P _c	75	mW
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter-Collector Voltage	V _{ECO}	7	V
Operating Temperature	T _{opr}	-25~+85	°C
Storage Temperature	T _{stg}	-40~+85	°C
Soldering Temperature (1/16 inch from body for 5 seconds)	T _{sol}	260	°C

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Electrical Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Collector-Emitter Leakage Current	I_{CEO}			100	nA	$V_{CE}=10V$
Emitter -Collector Saturation Voltage	$V_{CE(Sat)}$			300	mV	$I_c=5mA / I_b=1mA$
Wavelength Of Peak Sensitivity	λ_p		940		nm	
Rang Of Spectral Bandwidth	$\lambda_{0.5}$	1000		1800	nm	
Collector-Emitter Breakdown Voltage	BV_{CEO}	40			V	$I_{EC}=500 \mu A$
C-B Breakdown Voltage	BV_{CBO}	50				$I_{CB}=50 \mu A$
E-B Breakdown Voltage	BV_{EBO}	6				$I_{EB}=50 \mu A$
Emitter -Collector Breakdown Voltage	BV_{ECO}	6.5			V	$I_{EC}=50 \mu A$
Response Time	Rise Time	t_r		10	μS	$V_{CE}=5V, I_c=1mA$ $R_L=1000\Omega$
	Fall Time	t_f		10	μS	

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Typical Electrical-Optical Characteristics Curves

