广东洲光源红外半导体有限公司

Guangdong ChauLight Infrared Semiconductor Co., Ltd.

Specification

规 格 书

Customer Name:

客户名称:

Customer P/N:

客户品号:

Factory P/N:

公司品号：ZPT-3216B-19D-R15

Client approval 客户审核			Baiheng approval 审核		
Approval 核准	Audit 确认	Confirmation 制作	Approval 核准	Audit 确认	Confirmation 制作
					周 宏
☐ Qualified 接受		☐ Disqualified 不接受	DATE: 日期：2020-11-06		

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注:1. 此规格书以中英文方式书写,若有冲突以中文版本为准文本.

2. 此规格书的最终解释权归广东洲光源红外半导体科技技术有限公司

3. 此规格书的有效期限为两年,自盖章或签字之日起计算,期满时双方可以续签协议,但应采用书面形式

ZPT-3216B-19D-R15

1.9mm Height Flat Top Phototransistor

Descriptions

ZPT-3216B-19D-Z3 is a phototransistor in miniature SMD package which is molded in a black with flat top view lens.
The device is Spectrally matched to visible and infrared emitting diode.

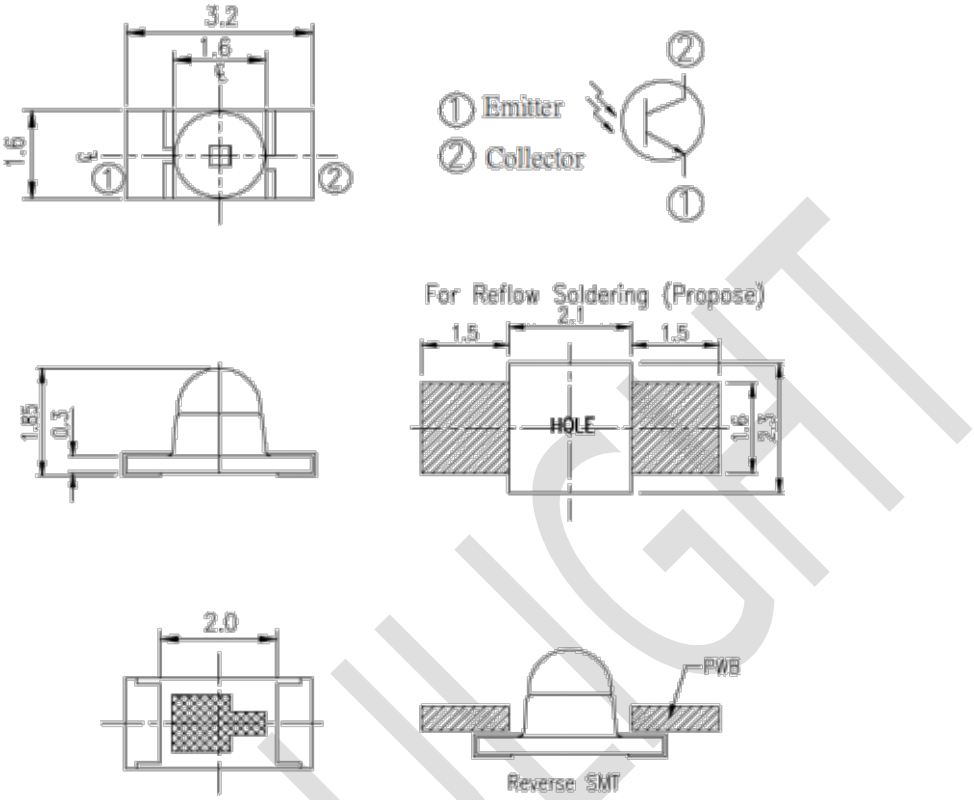
Features

- Fast response time
- High photo sensitivity
- Small junction capacitance
- Pb free
- The product itself will remain within RoHS compliant version
- Compliance with EU REACH

Applications

- Miniature switch
- Counters and sorter
- Position sensor
- Infrared applied system
- Encoder

Package Dimensions



Notes:1.All dimensions are in millimeters
2.Tolerances unless dimensions ±0.1mm
3.Suggested pad dimension is just for reference only
Please modify the pad dimension based on individual need

Rank

Parameter	Symbol	Condition	Min.	Max.	Unit
BIN5	$I_{C(ON)}$	VCE=5V Ee=1mW/c ㎡	2.19	3.14	mA
BIN6	$I_{C(ON)}$	VCE=5V Ee=1mW/c ㎡	3.14	4.30	mA
BIN7	$I_{C(ON)}$	VCE=5V Ee=1mW/c ㎡	4.30	6.04	mA

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Collector-Voltage	V_{ECO}	5	V
Collector Current	I_C	20	mA
Operating Temperature	T_{opr}	-25 ~ +85	℃
Storage Temperature	T_{stg}	-40 ~ +85	℃
Soldering Temperature *1	T_{sol}	260	℃
Power Dissipation at(or below) 25℃Free Air Temperature	P_d	75	mW

Notes: *1:Soldering time 5 seconds.

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Rang Of Spectral Bandwidth	$\lambda_{0.5}$	---	700	---	1100	nm
Wavelength Of Peak Sensitivity	λ_P	---	---	940	---	nm
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=100μA Ee=0mW/cm^2	30	---	---	V
Emitter-Collector Breakdown Voltage	BV_{ECO}	I_E=100μA Ee=0mW/cm^2	5	---	---	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2mA Ee=1mW/cm^2	---	---	0.4	V
Collector Dark Current	I_{CEO}	V_{CE}=20V Ee=0mW/cm^2	---	---	100	nA
On State Collector Current	$I_{C(ON)}$	V_{CE}=5V Ee=1mW/cm^2	2.19	4.05		mA

Typical Electro-Optical Characteristics Curves

Fig.2 Spectral Sensitivity

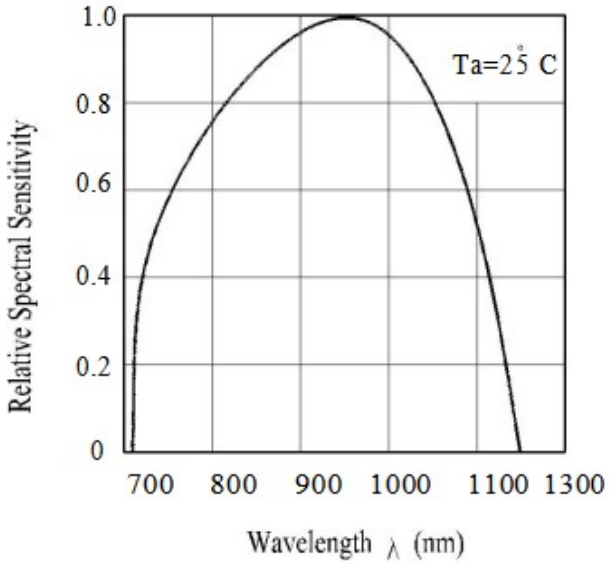


Fig.4 Collector Current vs. Irradiance

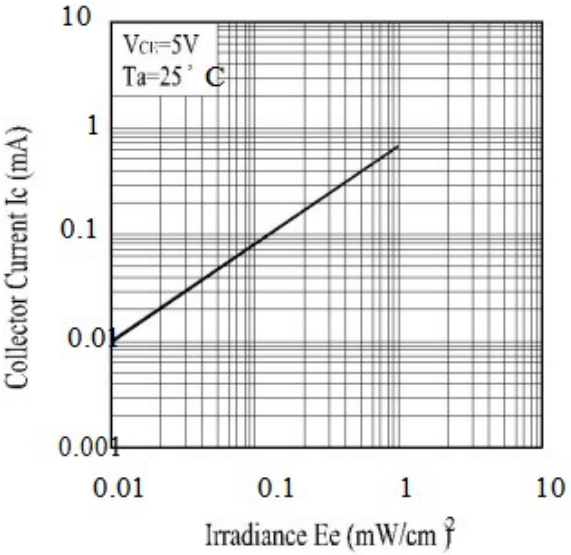
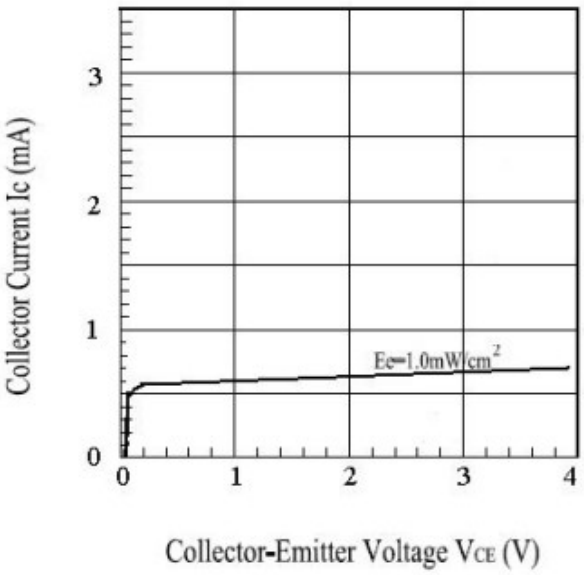
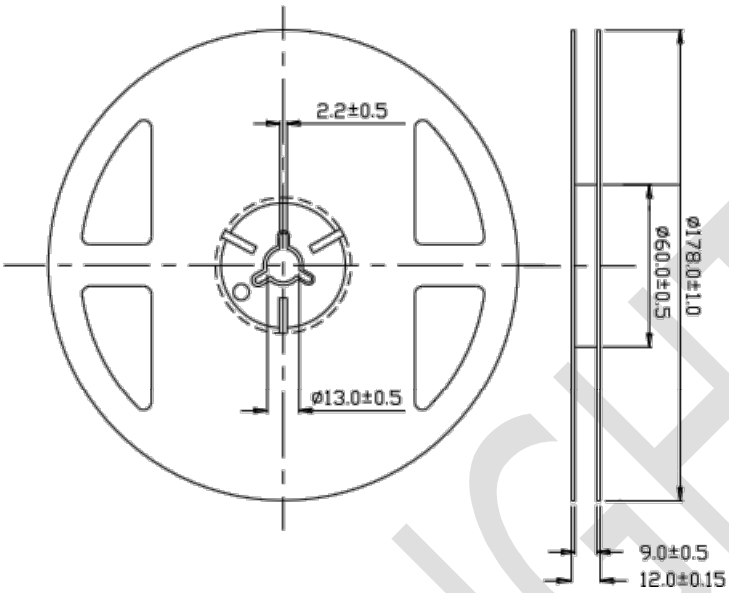


Fig.3 Collector Current vs. Collector-Emitter Voltage



Package Dimensions



Note: The tolerances unless mentioned are ±0.1mm, Unit: mm

Carrier Tape Dimensions: (Loaded Quantity: 1500pcs/reel)

Note: The tolerances unless mentioned are ±0.1mm, Unit: mm