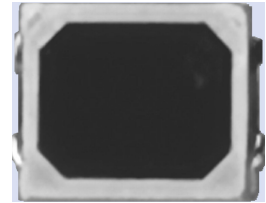


Technical Data Sheet

SMD Phototransistor: PT6724B

■ Features

- Fast response time
- High photo sensitivity
- Pb free
- The product itself will remain within RoHS compliant version.



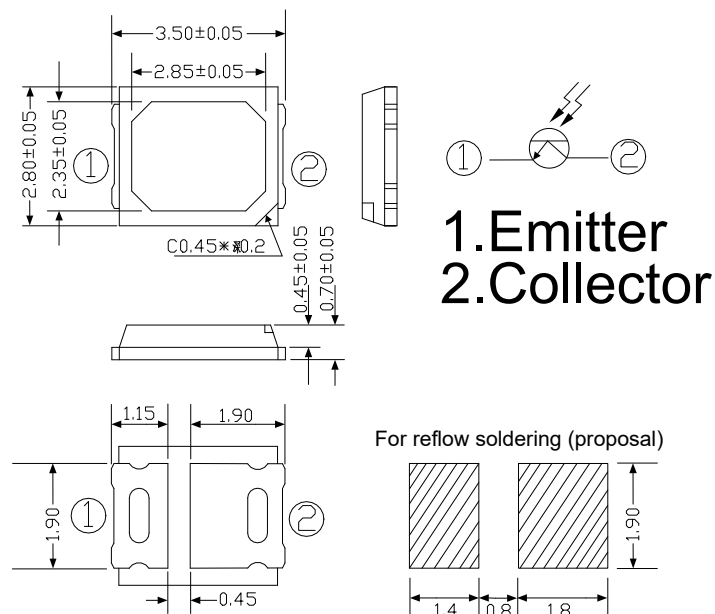
■ Descriptions

PT6724B is a high speed and high sensitive NPN silicon epitaxial planar phototransistor in a miniature flat top view lens SMD package. Due to its black epoxy the device is sensitive to infrared radiation.

■ Applications

- Infrared applied system
- Security system
- Camera
- Optoelectronic switch

■ Package Dimensions



Note: 1. All dimensions are in millimeters
2. Tolerances unless dimensions $\pm 0.1\text{mm}$

■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Collector-Voltage	V _{ECO}	6.5	V
Collector Current	I _C	20	mA
Power Dissipation at (or below) 25°C Free Air Temperature	P _c	75	mW
Lead Soldering Temperature	T _{sol}	260	°C
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

■ Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Rang of Spectral Bandwidth	$\lambda_{0.5}$	---	840	--	1100	nm
Wavelength of Peak Sensitivity	λ_p	---	--	940	--	nm
Collector – Emitter Breakdown Voltage	BV _{CEO}	I _C =100μA Ee=0mW/cm ²	30	--	100	V
Emitter-Collector Breakdown Voltage	BV _{ECO}	I _E =100μA Ee=0mW/cm ²	6.5	--	--	V
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =2mA Ee=1mW/cm ²	--	--	0.2	V
Rise Time	t _r	V _{CE} =5V I _C =1mA RL=1000Ω	--	15	--	μS
Fall Time	t _f		--	15	--	μS
DC Current Amplification Factor	H _{FE}	V _{CE} =5V, I _C =2mA	1000	--	1800	
Collector Dark Current	I _{CEO}	Ee=0mW/cm ² V _{CE} =20V	--	--	100	nA
On State Collector Current	I _{C(on)}	Ee=1mW/cm ² V _{CE} =5V	0.5	1.5	--	mA

■ Typical Electro-Optical Characteristics Curves

Fig.1 Collector Power Dissipation vs. Ambient Temperature

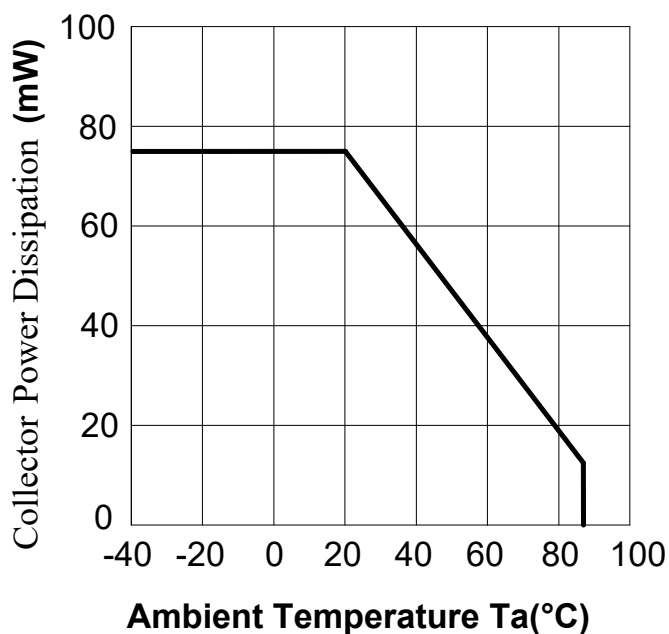


Fig.2 Spectral Sensitivity

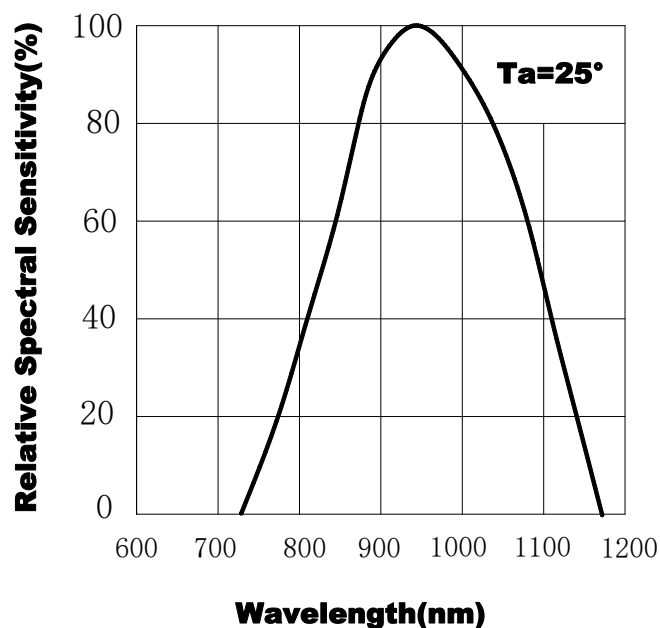


Fig.3 Relativ Collector Current vs. Ambient Temperature

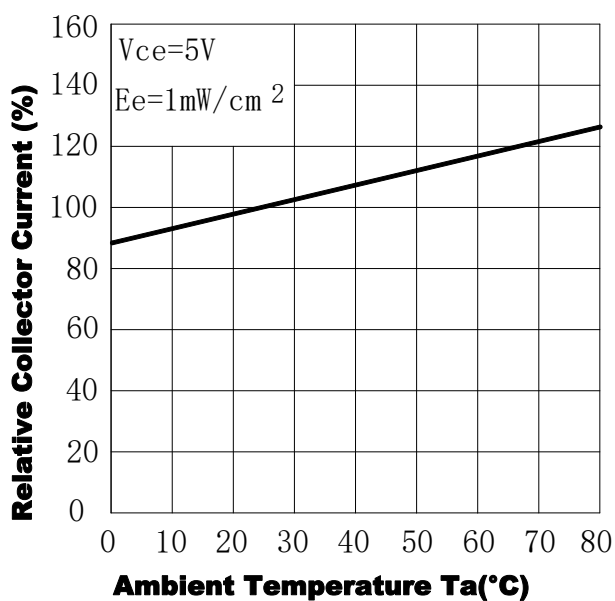


Fig.4 Collector Current vs. Irradiance

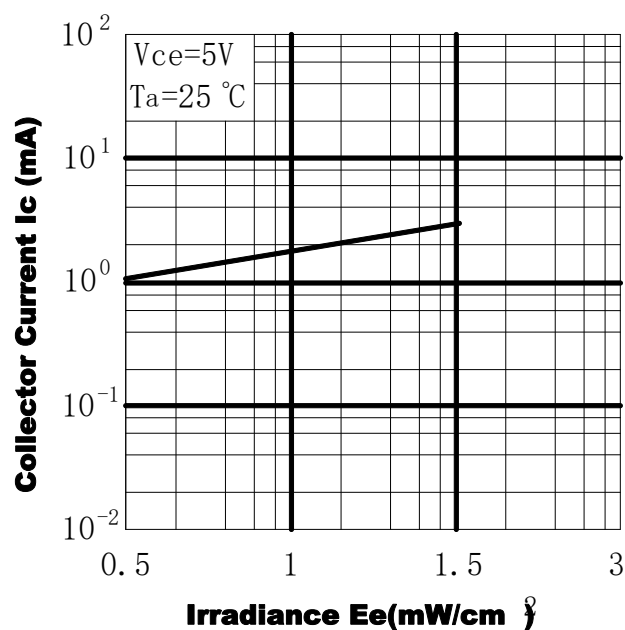


Fig.5 Collector Dark Current vs.
Ambient Temperature

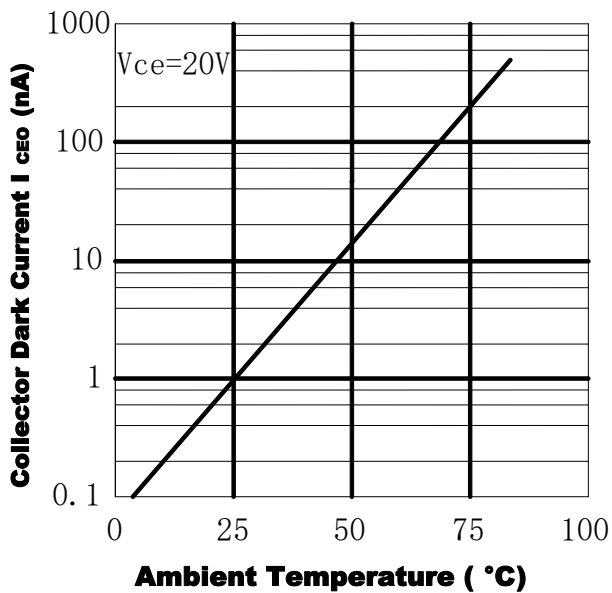
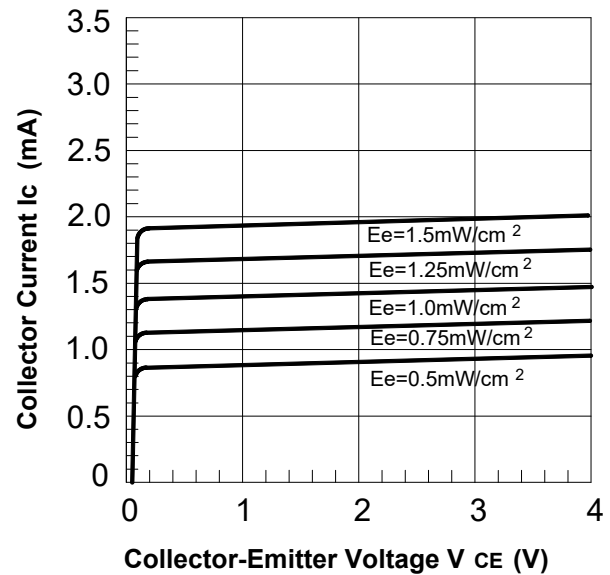
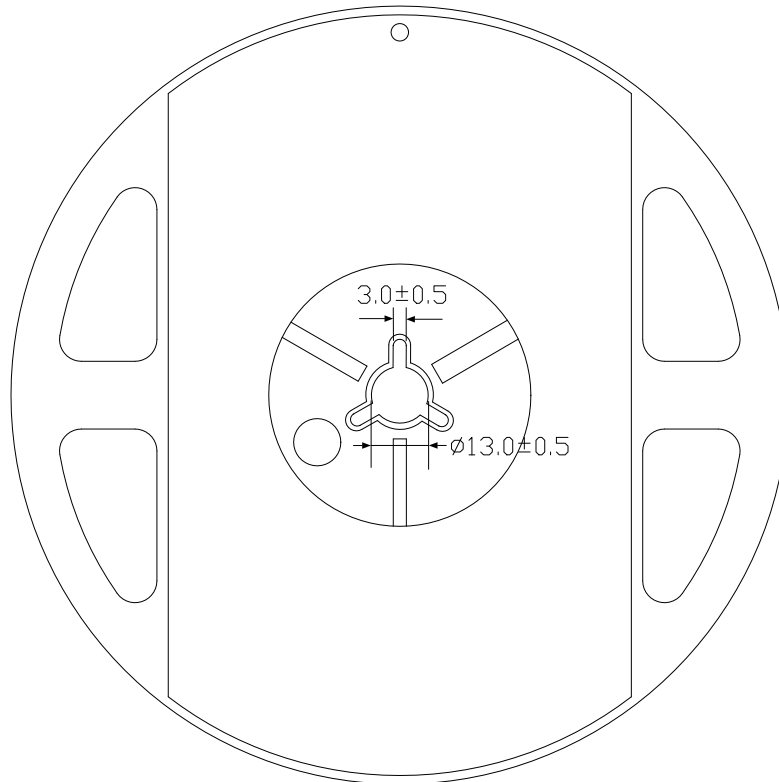


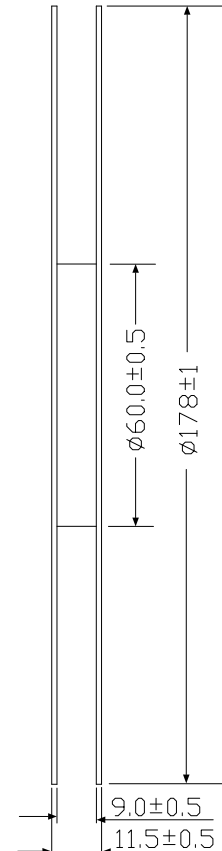
Fig.6 Collector Current vs.
Collector-Emitter Voltage



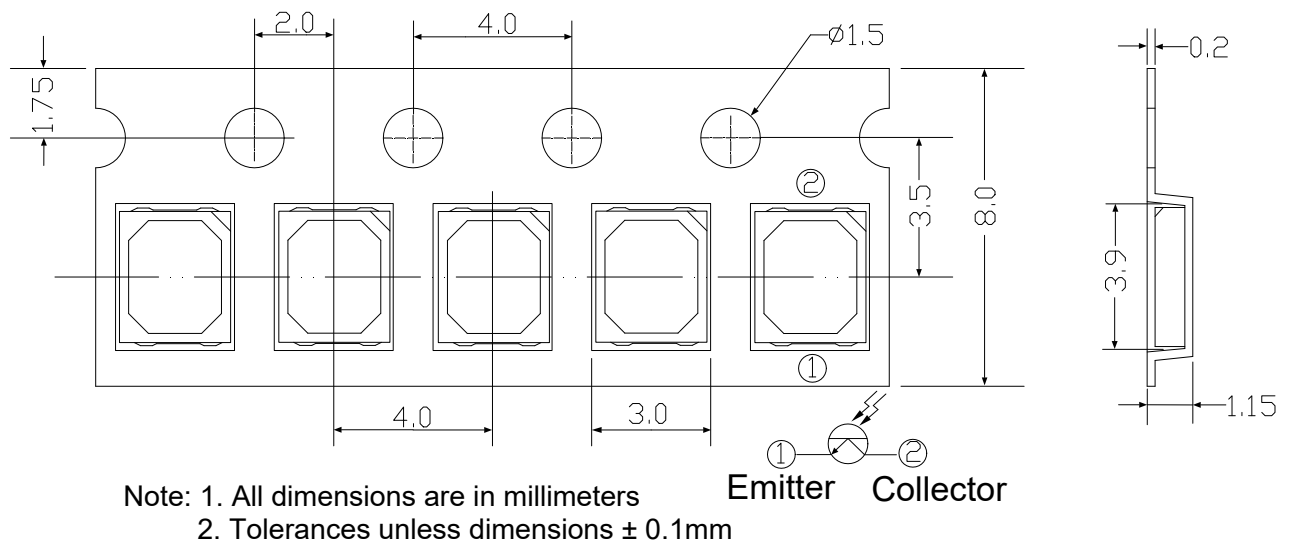
■ Packing Dimensions



Note: 1. All dimensions are in millimeters



■ Carrier Tape Dimensions (Quantity: 4000 pcs/reel)



■ Notes

1. Above specification may be changed without notice. SHUGUAN will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. SHUGUAN assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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