



LEDTECH ELECTRONICS CORP.

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Http://www.ledtech.com.tw

SPECIFICATION

PART NO. : LT0395-46-0125-ED9

3.0MM ROUND PHOTOTRANSISTOR

Approved by	Checked by	Prepared by
<i>Jack</i>	<i>Jang</i>	<i>Bao Min</i>



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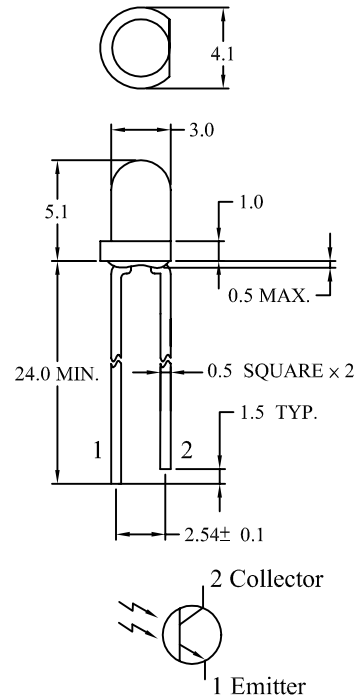
Features

- * Stable characteristics
- * High sensitivity
- * Spectrally and mechanically matched with IR emitter

Description

The LT0395-46-0125-ED9 is a high speed and high sensitive silicon NPN epitaxial planar phototransistor in a standard 3.0mm package. The device is sensitive to visible and near infrared radiation.

Package Dimensions



Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.

PART NO.	CHIP	LENS COLOR
	MATERIAL	
LT0395-46-0125-ED9	Silicon	Black



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Absolute Maximum Ratings at Ta=25°C :

Parameter	Symbol	Rating	Unit
Power dissipation	Pd	75	mW
Collector-emitter voltage	V _{CEO}	30	V
Emitter-collector voltage	V _{ECO}	5	V
Operating Temperature Range	T _{opr}	-25 to +85	°C
Storage Temperature Range	T _{stg}	-40 to +100	°C
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	°C

Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	V _{(BR)CEO}	Ee=0mW/cm ² I _C =100 μA	30			V
Emitter-collector breakdown voltage	V _{(BR)ECO}	Ee=0mW/cm ² I _E =100 μA	5			V
Collector-emitter saturation voltage	V _{(SAT)CE}	Ee=1mW/cm ² I _C =2mA			0.3	V
Rise time	T _r	V _{CE} =5V I _C =1mA R _L =1000Ω		15		μS
Fall time	T _f			15		μS
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	0.6	2.0		mA
Peak Sensitivity Wavelength	λ _p			860		nm



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Typical Electrical / Optical Characteristics Curves :

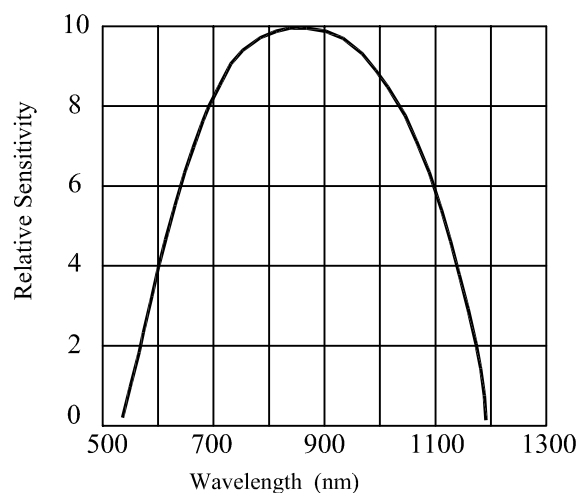


Fig. 1 Spectral Sensitivity VS. Peak Wavelength

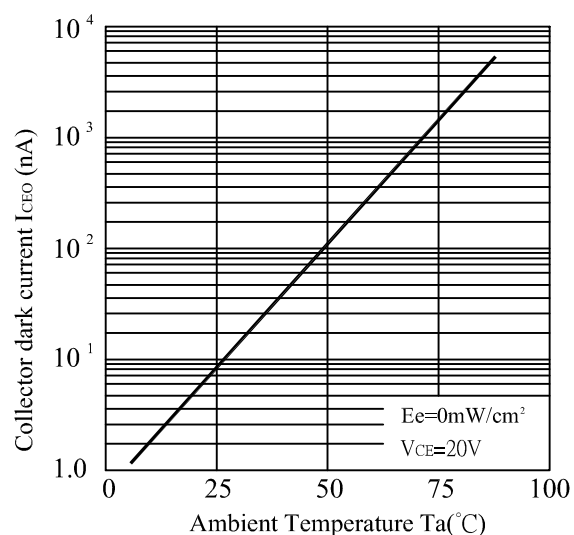


Fig. 2 Collector Dark Current VS. Ambient Temperature

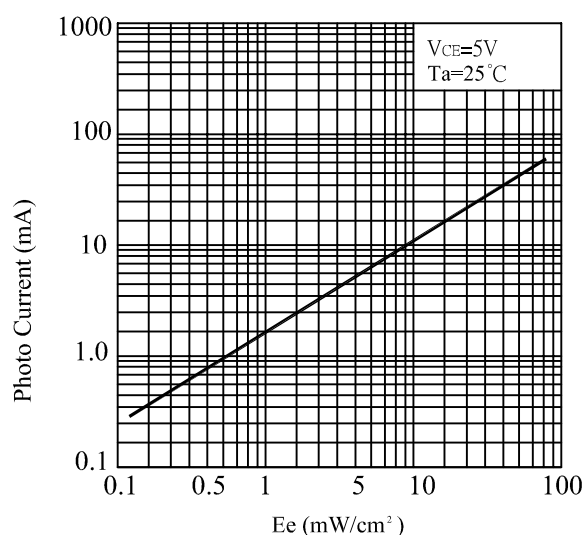


Fig. 3 Photo Current VS. Irradiance

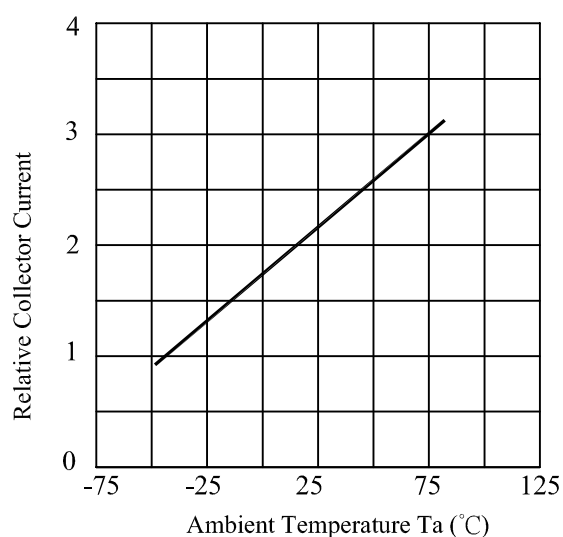


Fig. 4 Collector Current VS. Ambient Temperature



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Reliability Test Method :

Test Item	Test Condition	Duration Time
Storage at High Temperature	Ta=100°C	168hrs
Storage at Low Temperature	Ta=-40°C	168hrs
Storage at High Temperature/High Humidity	Ta=85°C /RH=85%	168hrs
Operating at High Temperature	Ta=85°C / If=20mA	168hrs
Operating at Low Temperature	Ta=-25°C / If=20mA	168hrs
Thermal Shock	Ta/T=100°C/30min~ -40°C/30min	10 cycles
Solderability	Tsol=230°C	5 sec



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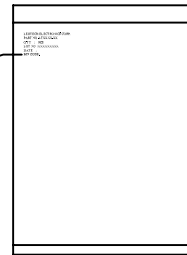
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ENCASED TYPE

PLASTIC PACKAGE

QUANTITY: 1,000 PCS

LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXXX
DATE :
BIN CODE:

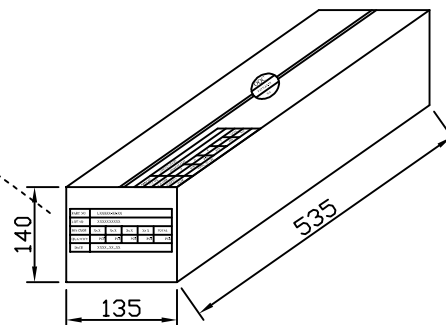


INNER BOX

QUANTITY: 20 PACKETS

TOTAL: 20,000 PCS

PART NO.	LXXXXX-XX-XX				
LOT NO.	XXXXXXXXXX				
BIN CODE	Xx X	Xx X	Xx X	Xx X	TOTAL
QUANTITY	PCS	PCS	PCS	PCS	PCS
DATE	XXXX, XX, XX				



OUTER CARTON

QUANTITY: 4 BOX

TOTAL: 80,000 PCS

C/T NO. 箱 號	XX
PART NO. 料 號	LXXXXX-XX-XX
QUANTITY 數 量	PCS
N.W. 淨 重	KGS
G.W. 毛 重	KGS
REMARK 備 註	

