



· NANYA ROAD,MUGANG ZHAOQING
· CITY GUANGDONG CHINA.

· TEL:86-758-2875541,2870651,2877464,2876185,2877017

· FAX:86-758-2878014

· *Http://www.ledtech.com.tw*

LEDTECH ELECTRONICS CORP.

SPECIFICATION

PART NO. : LT0293-A7-0125

1.8MM AXIAL PHOTOTRANSISTOR

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



1.8MM AXIAL PHOTOTRANSISTOR

PART NO. : LT0293-A7-0125

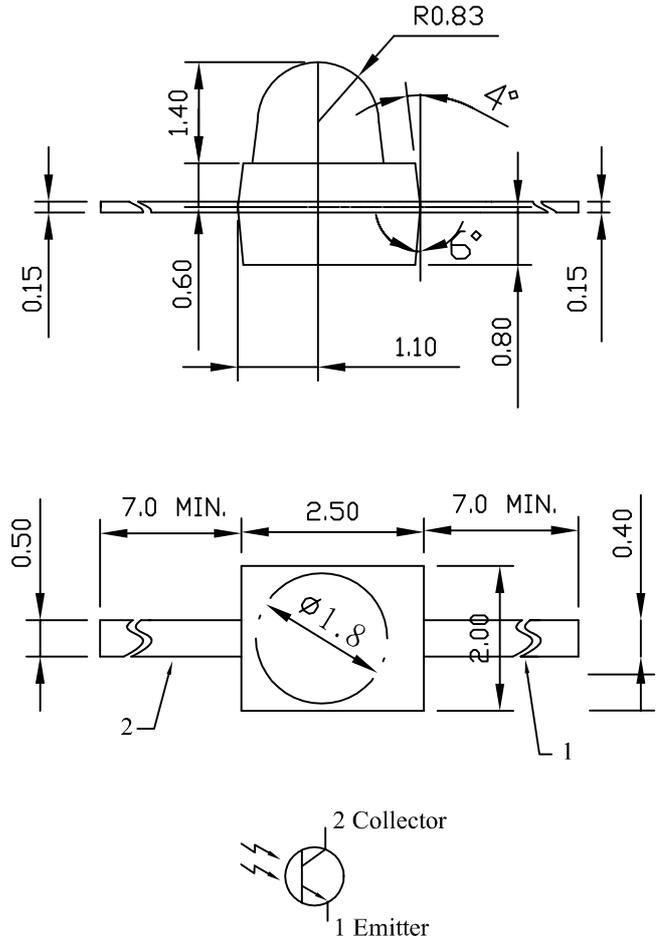
Features

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

Description

The LT0293-A7-0125 is a high speed and high sensitive silicon NPN epitaxial planar phototransistor in a standard 1.8mm axial 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	
LT0293-A7-0125	Silicon	Water clear



1.8MM AXIAL PHOTOTRANSISTOR

PART NO. : LT0293-A7-0125

Page : 2/5

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		15		μS
Fall time	T _f	R _L =1000Ω		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



1.8MM AXIAL PHOTOTRANSISTOR

PART NO. : LT0293-A7-0125

Typical Electrical / Optical Characteristics Curves :

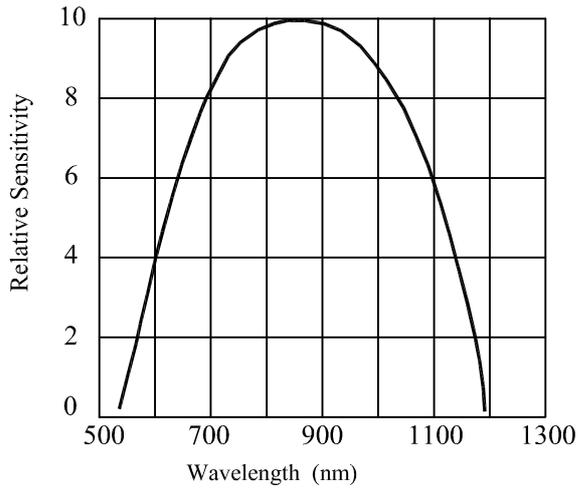


Fig. 1 Spectral Sensitivity VS. Peak Wavelength

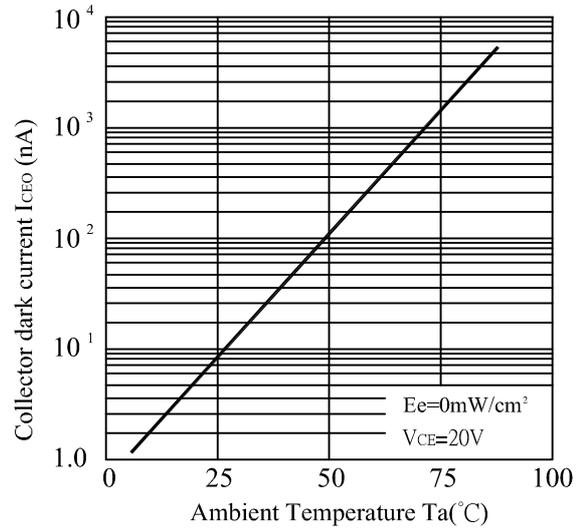


Fig. 2 Collector Dark Current VS. Ambient Temperature

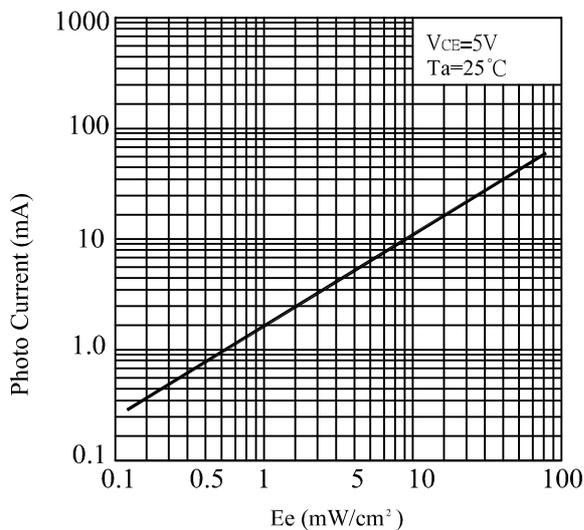


Fig. 3 Photo Current VS. Irradiance

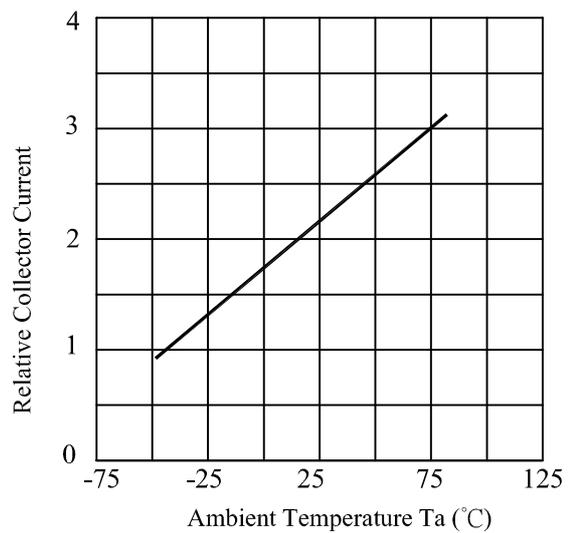


Fig. 4 Collector Current VS. Ambient Temperature



1.8MM AXIAL PHOTOTRANSISTOR

PART NO. : LT0293-A7-0125

Page : 4/5

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



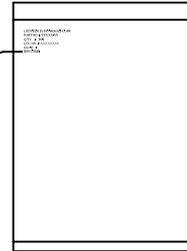
1.8MM AXIAL PHOTOTRANSISTOR

PART NO. : LT0293-A7-0125

ENCASED TYPE

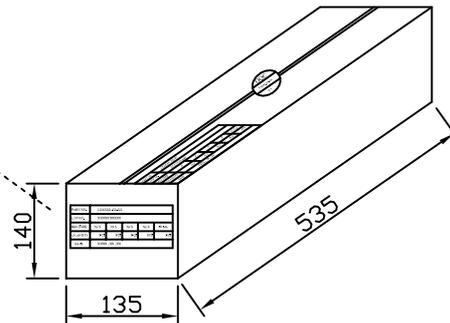
PLASTIC PACKAGE
 QUANTITY: 1,000 PCS

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



INNER BOX
 QUANTITY: 50 PACKETS
 TOTAL: 50,000 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: 200,000 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	

