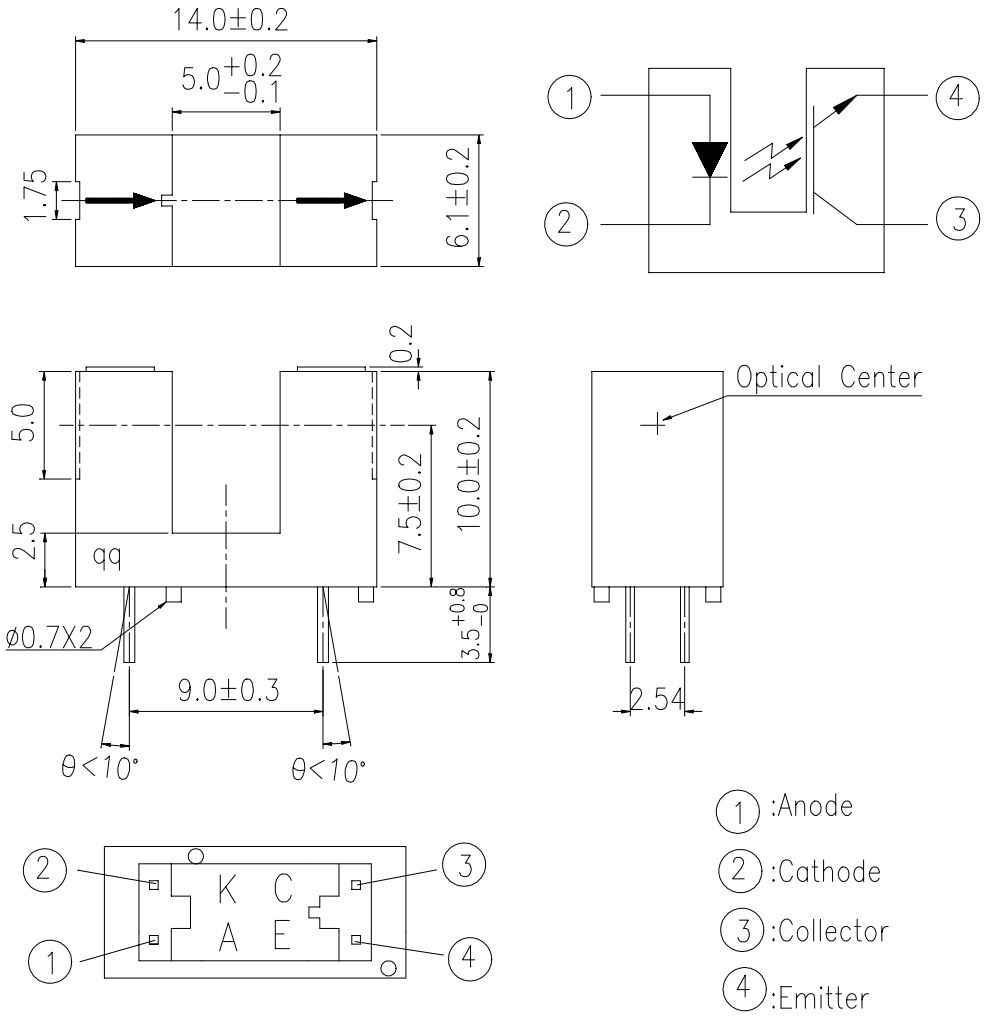
■ PACKAGE DIMENSIONS :



UNIT: mm

ABOVE SPECIFICATION MAY BE CHANGED WITHOUT NOTICE. SUPPLIER'S WILL RESERVE AUTHORITY ON MATERIAL CHANGE FOR ABOVE SPECIFICATION.

DESIGNER	CHECKER	APPROVED

Office: NO 25,Lane 76,Chung Yang Rd,,Sec.3
Tucheng, Taipei 236,Taiwan, R.O.C.
TEL:886-2-2267-2000,2267-9936(22Lines)
FAX:886-2-2267-6189

■DESCRIPTION

EVERLIGHT Infrared Emitting Diode (IR908-7C) is a high power of infrared emitting diode, molded in a clear, pink tinted plastic package with spherical side view lens.

The device is spectrally matched to silicone phototransistor and photo diode, this type (ITR8406) is matched to silicone phototransistor.

EVERLIGHT Photo Transistor (PT908-6C) is a high speed and high sensitivity phototransistor, molded in a clear, clear tinted plastic package with spherical side view lens.

The epoxy package spectrally matched to IR emitters (λp=940nm).

■FEATURES

IR:

- Low Forward Voltage
- Peak wavelength λp=940nm
- High radiant power and High radiant intensity
- High reliability

PT:

- High sensitivity
- Fast response time

ITR:

- Fast response time

■APPLICATIONS

- Printer
- Opto-electronic Switches
- Scanner

■ ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

PARAMETER		SYMBOL	RATING	UNIT
INPUT	POWER DISSIPATION	Pd	75	mW
	REVERSE VOLTAGE	Vr	5	V
	FORWARD CURRENT	If	50	mA
	PEAK FORWARD CURRENT (*1)	Ifp	1	A
OUTPUT	COLLECTOR POWER DISSIPATION	Pc	100	mW
	COLLECTOR CURRENT	Ic	30	mA
	C-E VOLTAGE BREAKDOWN	Vceo	30	V
	E-C VOLTAGE BREAKDOWN	Veco	5	V
OPERATING TEMPERATURE		Topr	-20~+85	℃
STORAGE TEMPERATURE		Tstg	-30~+85	℃
SOLDERING TEMPERATURE (*2)		Tsol	260	℃

(*1) tw=100 uSec. , T=10 mSec. (*2) 1/16 inch from body for 5 sec

■ ELECTRICAL CHARACTERISTICS (Ta=25℃)

Parameter		Symbol	Min	Typ	Max	Unit	Condition
Input	Forward voltage	V_F	---	1.2	1.6	V	I_F=20mA
	Reverse current	I_R	---	---	10	μA	V_R=5V
	Peak wavelength	λ_P	---	940	---	nm	
Output	Dark current	I_{CEO}	---	---	100	nA	V_{CE}=10V E_E=0mw/c㎡
	C-E saturation voltage	V_{CE} (sat)	---	---	0.4	V	IC=0.5mA H=0.5mw/c㎡ If=20mA
Light current		I_L	0.5	---	---	mA	V_{CE}=5V
Leakage current		I_{CEOD}	---	---	20	μA	I_F=20mA
Speed	Rise time	T_R	---	20	---	μsec	V_{CC}=5V
	Fall time	T_F	---	20	---	μsec	I_C=1mA R_L=1000Ω

■ TYPICAL CHARACTERISTICS FOR IR

Fig. 1 Forward Current vs. Ambient Temperature

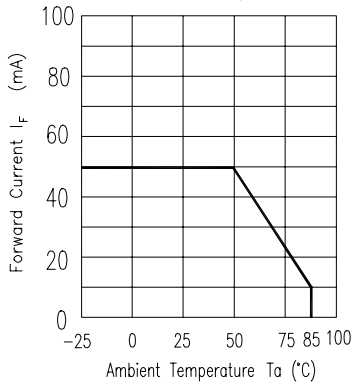


Fig. 2 Spectral Distribution

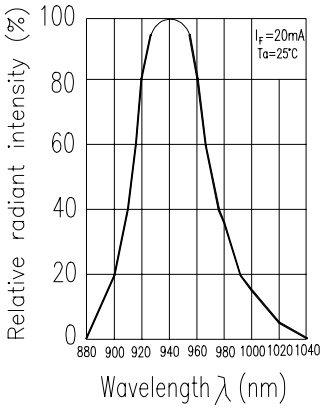


Fig. 3 Peak Emission Wavelength vs. Ambient Temperature

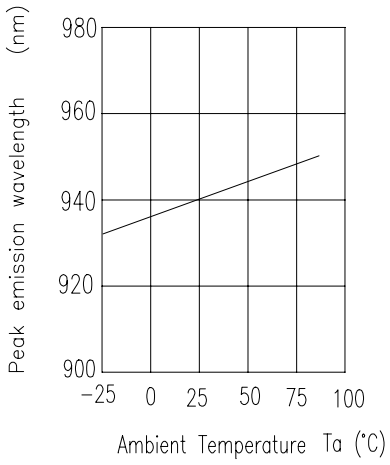


Fig. 4 Forward Current vs. Forward Voltage

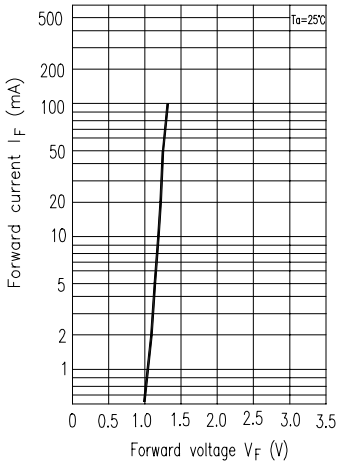


Fig. 5 Relative Radiant Flux vs. Ambient Temperature

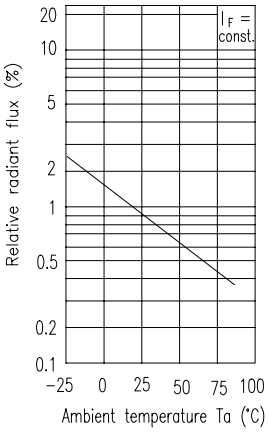
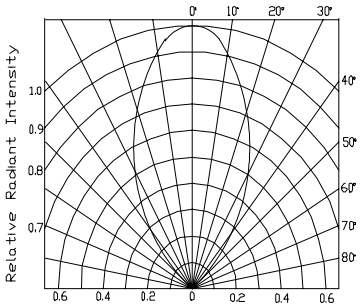


Fig. 6 Relative Radiant Intensity vs. Angular Displacement



TYPICAL CHARACTERISTICS FOR PT

Fig.1 Collector Power Dissipation vs. Ambient Temperature

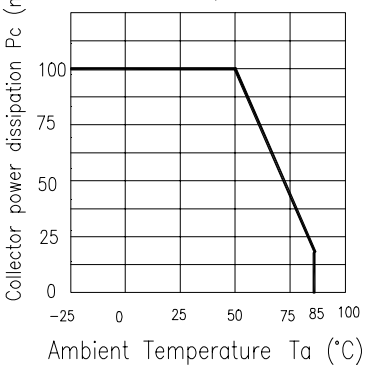


Fig.2 Collector Dark Current vs. Ambient Temperature

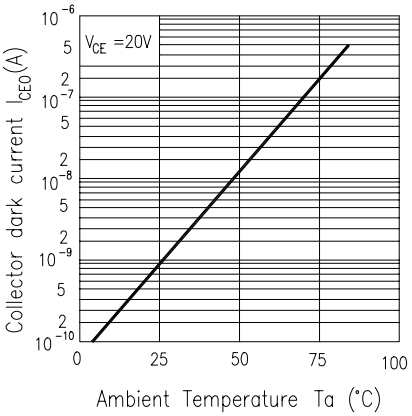


Fig. 3 Relative Collector Current vs. Ambient Temperature

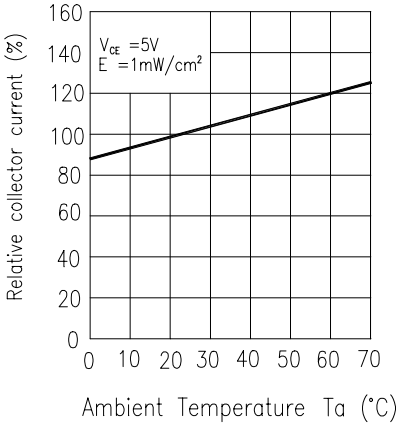


Fig.4 Collector Current vs. Irradiance

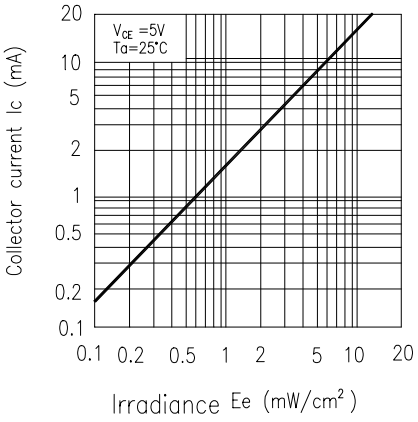


Fig.5 Spectral Sensitivity

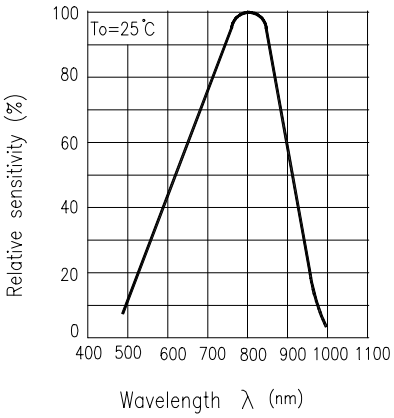
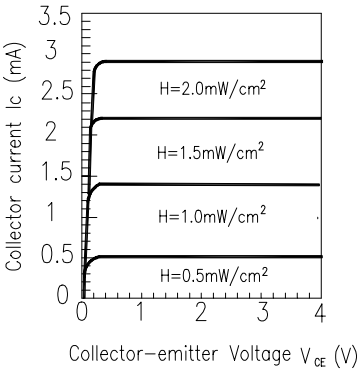
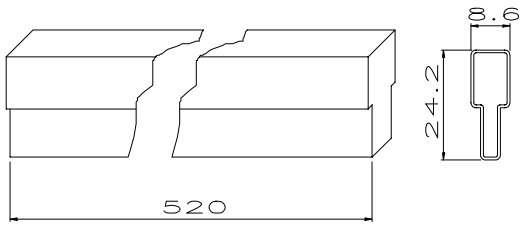


Fig.6 Collector Current vs. Collector-emitter Voltage



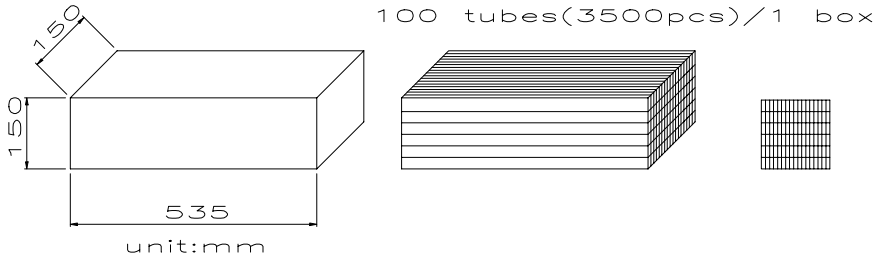
Package Style



EVERLIGHT ELECTRONIC CO.,LTD.
ITR8406—S NEW PACKING WAY

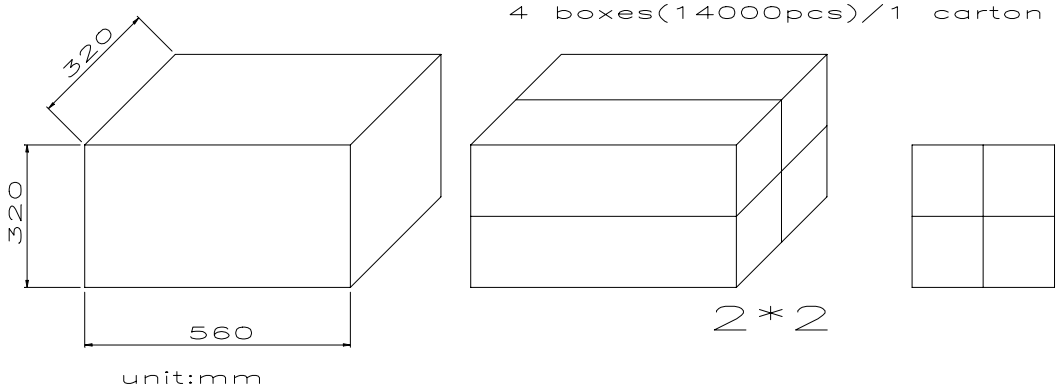
35 pcs/1 tube

unit:mm



100 tubes(3500pcs)/1 box

unit:mm



4 boxes(14000pcs)/1 carton

unit:mm