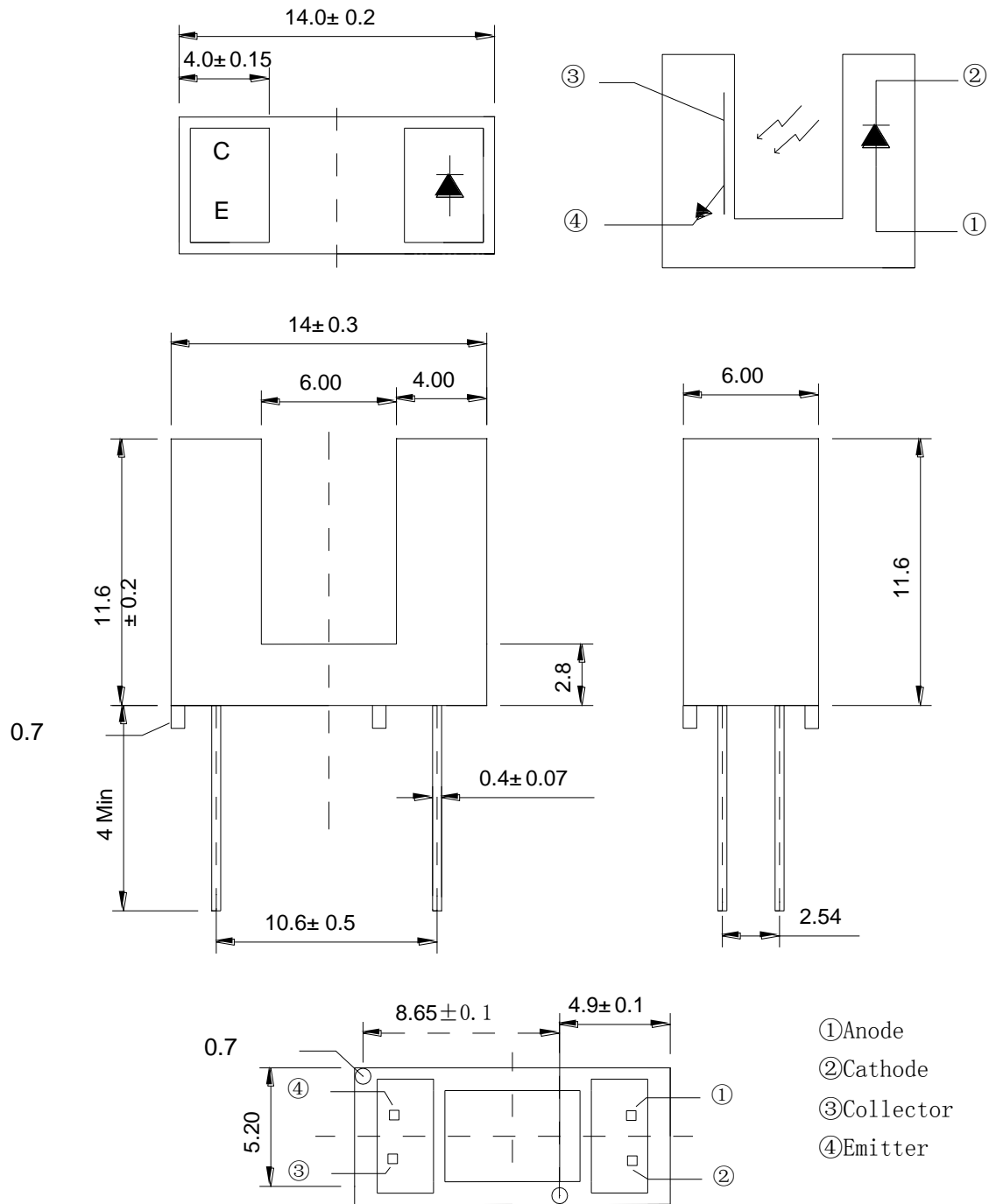


Package Dimensions



Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at (or below) 25°C Free Air Temperature	Pd	75	mW
	Reverse Voltage	V _R	5	V
	Forward Current	I _F	50	mA
	Peak Forward Current (*1) Pulse width ≤ 100 μs, Duty cycle=1%	I _{FP}	1	A
	Collector Power Dissipation	P _C	100	mW
Output	Collector Current	I _C	50	mA
	Collector-Emitter Voltage	B V _{CEO}	30	V
	Emitter-Collector Voltage	B V _{ECO}	5	V
	Operating Temperature	Topr	-20~+65	°C
Storage Temperature	Tstg	-30~+70	°C	
Lead Soldering Temperature (*2) (1/16 inch form body for 5 seconds)	Tsol	260	°C	

(*1) $t_w=100 \mu \text{sec.}$, $T=10 \text{msec.}$ (*2) $t=5 \text{Sec}$

Electro-Optical Characteristics (Ta=25°C)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Input	Forward Voltage	V _{F1}	---	1.2	1.6	V	I _F =20mA
	Reverse Current	I _R	---	---	10	μA	V _R =5V
	Peak Wavelength	λ _p	---	940	---	nm	I _F =20mA
	View Angle	2θ1/2	---	60	---	Deg	I _F =20mA
Output	Dark Current	I _{CEO}	---	---	100	nA	V _{CE} =20V, Ee=0mW/cm ²
	C-E Saturation Voltage	V _{CE(sat)}	---	---	0.4	V	I _C =2mA , Ee=1mW/cm ²
Transfer Characteristics	Collect Current	I _{C(ON)}	0.7	---	---	mA	V _{CE} =5V I _F =20mA
	Rise time	t _r	---	15	---	μsec	V _{CE} =5V
	Fall time	t _f	---	15	---	μsec	I _C =1mA R _L =1KΩ

Typical Electrical/Optical/Characteristics Curves for IR

Fig.1 Forward Current vs. Ambient Temperature

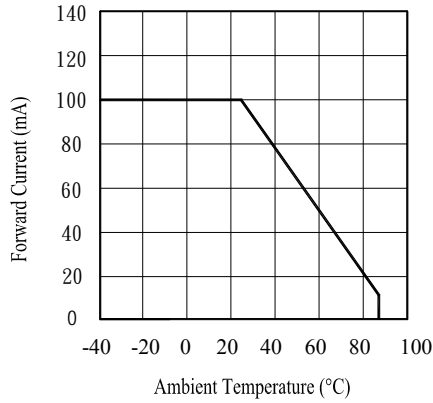


Fig.2 Spectral Distribution

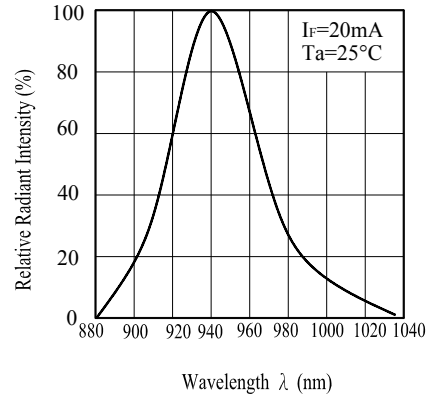


Fig.3 Relative Intensity vs. Forward Current

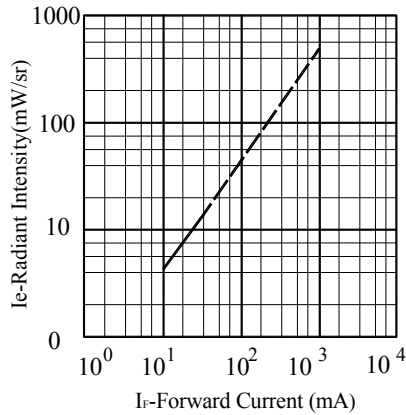


Fig.4 Relative Radiant Intensity vs. Angular Displacement

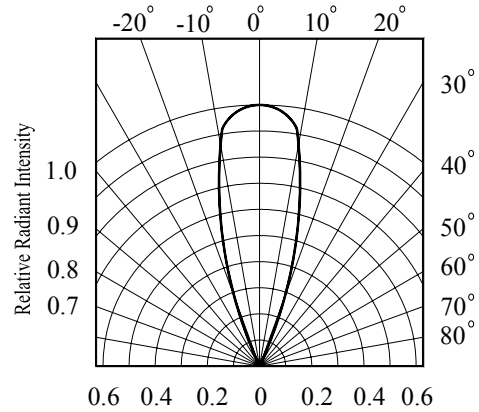


Fig.5 Relative Intensity vs. Ambient Temperature(°C)

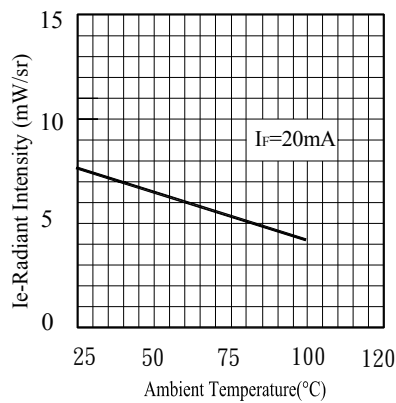
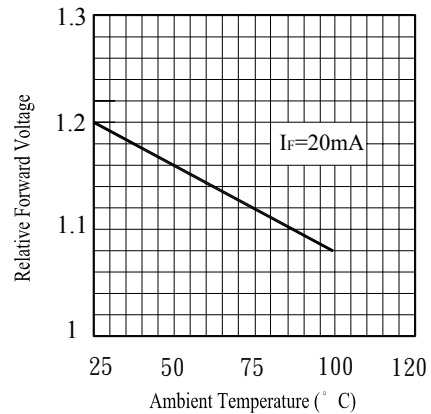


Fig.6 Forward Current vs. Ambient Temperature(°C)



Typical Electrical/Optical/Characteristics Curves for PT

Fig.1 Collector Power Dissipation vs. Ambient Temperature

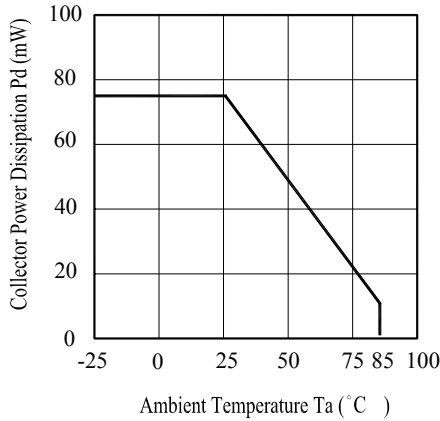


Fig.2 Spectral Sensitivity

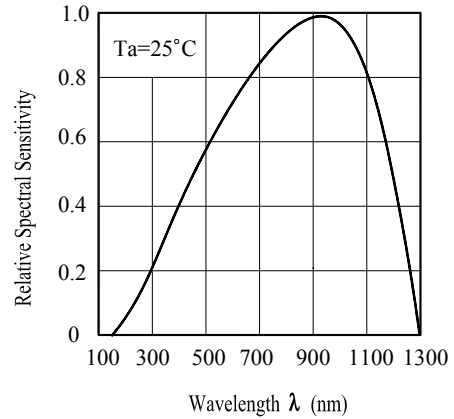


Fig.3 Relative Collector Current vs. Ambient Temperature

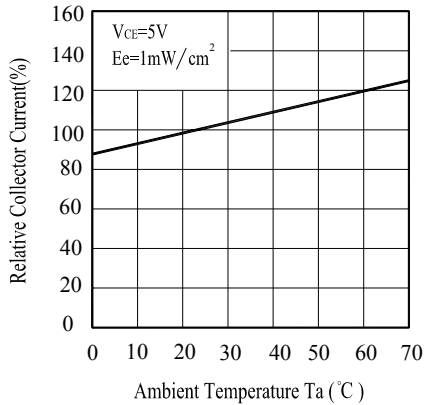


Fig.4 Collector Current vs. Irradiance

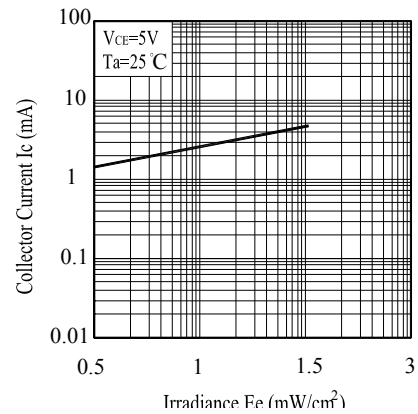


Fig.5 Collector Dark Current vs. Ambient Temperature

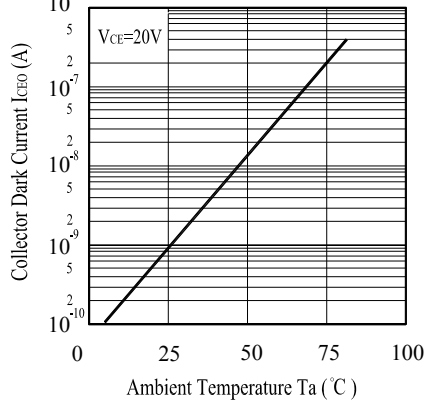


Fig.6 Collector Current vs. Collector-Emitter Voltage

