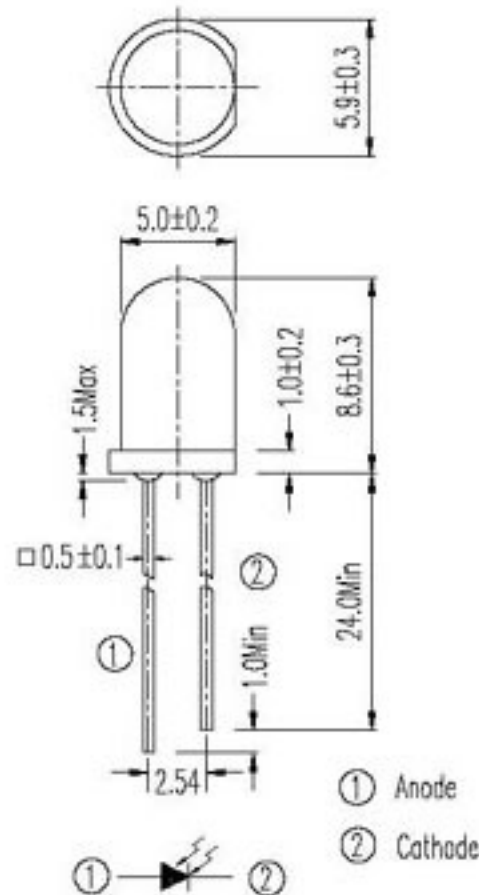


#### Package Dimensions



- Notes:** 1. All dimensions are in millimeters  
2. Tolerances unless dimensions  $\pm 0.25$ mm

#### Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Rating	Units
Collector-Emitter Voltage	$V_{CE0}$	30	V
Emitter-Collector-Voltage	$V_{ECO}$	5	V
Collector Current	$I_C$	20	mA
Operating Temperature	$T_{opr}$	$-25 \sim +85^\circ\text{C}$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-40 \sim +85^\circ\text{C}$	$^\circ\text{C}$
Lead Soldering Temperature	$T_{sol}$	260	$^\circ\text{C}$
Power Dissipation at (or below) 25 $^\circ\text{C}$ Free Air Temperature	$P_c$	75	mW

- Notes:** \*1: Soldering time  $\leq 5$  seconds.

**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	$\lambda_P$	---	---	940	---	nm
Collector – Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=100 \mu A$ $E_e=0mW/cm^2$	30	---	---	V
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	$I_E=100 \mu A$ $E_e=0mW/cm^2$	5	---	---	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2mA$ $E_e=1mW/cm^2$	---	---	0.4	V
Rise Time	$t_r$	$V_{CE}=5V$ $I_C=1mA$ $RL=1000 \Omega$	---	15	---	$\mu S$
Fall Time	$t_f$		---	15	---	
Collector Dark Current	$I_{CEO}$	$E_e=0mW/cm^2$ $V_{CE}=20V$	---	---	100	nA
On State Collector Current	$I_{C(on)}$	$E_e=1mW/cm^2$ $V_{CE}=5V$	0.7	2.0	---	mA

**Rankings**

Parameter	Symbol	Min	Max	Unit	Test Condition
G	$I_{C(on)}$	0.70	1.90	mA	$V_{CE}=5V$ $E_e=1mW/cm^2$
H		1.14	2.60		
J		1.77	3.61		
K		2.67	5.07		

### Typical Electro-Optical Characteristics Curves

Fig.1 Collector Power Dissipation vs. Ambient Temperature

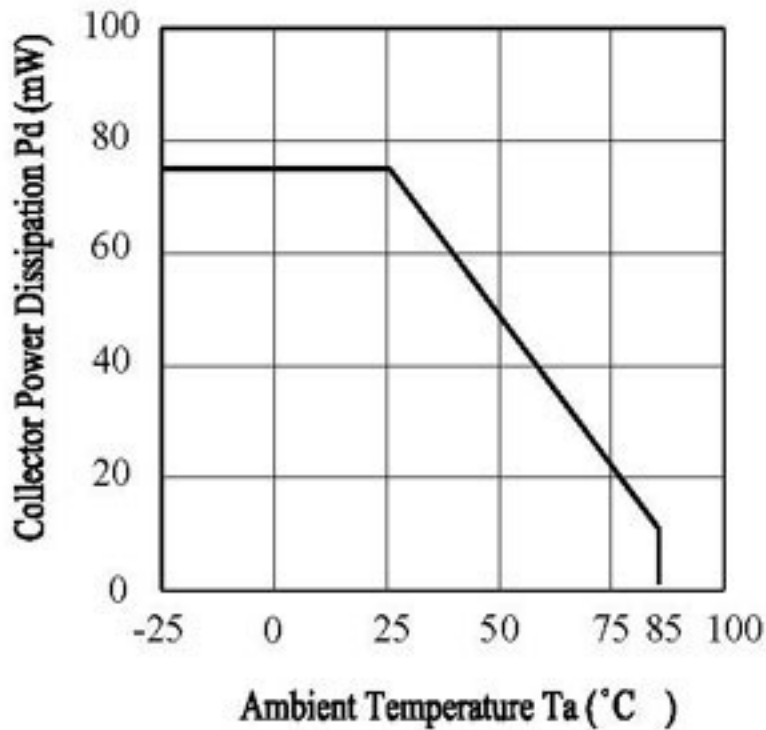


Fig.2 Spectral Sensitivity

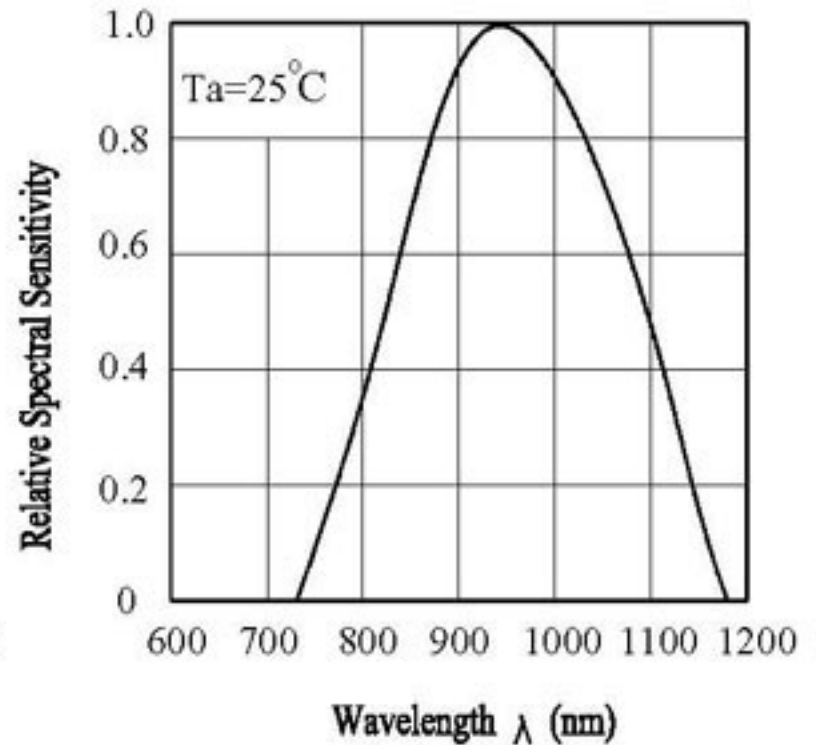


Fig.3 Relative Collector Current vs. Ambient Temperature

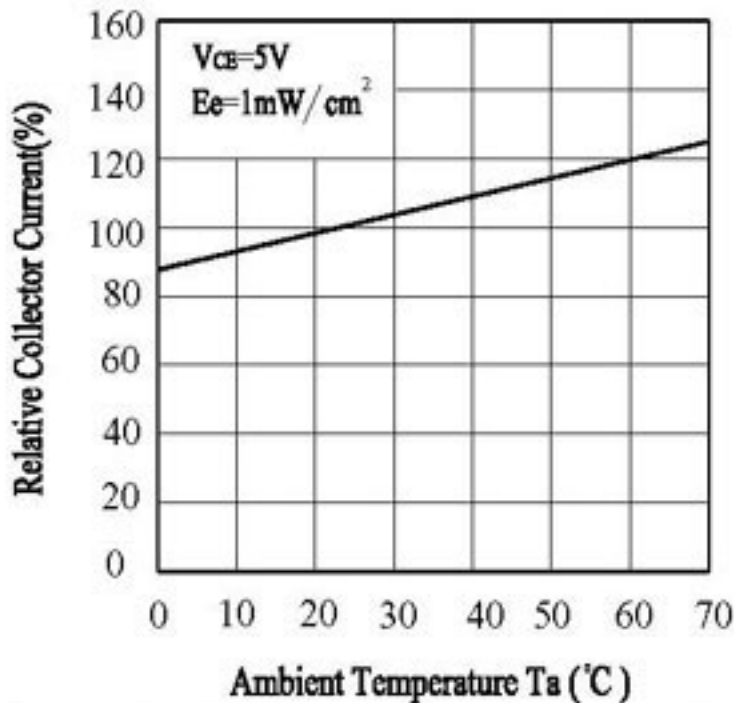
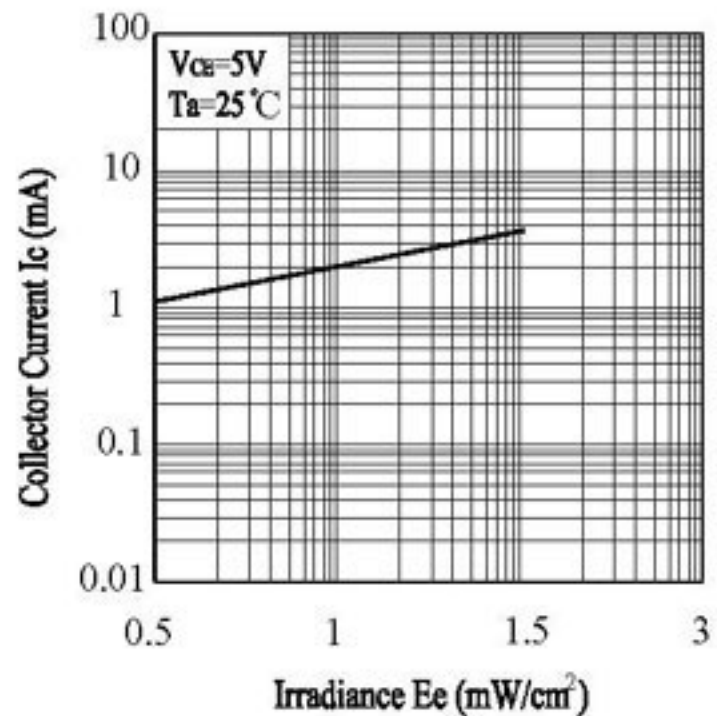


Fig.4 Collector Current vs. Irradiance



Typical Electro-Optical Characteristics Curves

Fig.5 Collector Dark Current vs. Ambient Temperature

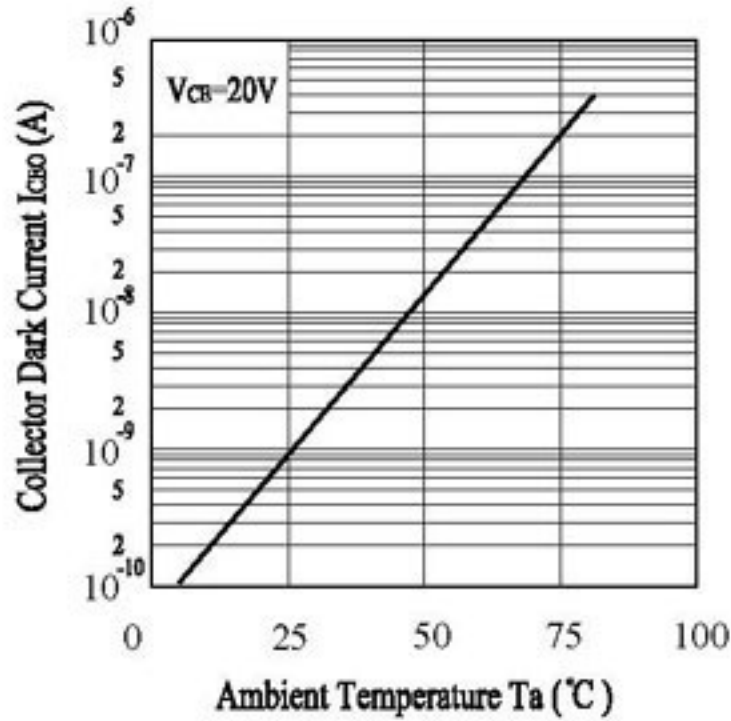


Fig.6 Collector Current vs. Collector-Emitter Voltage

