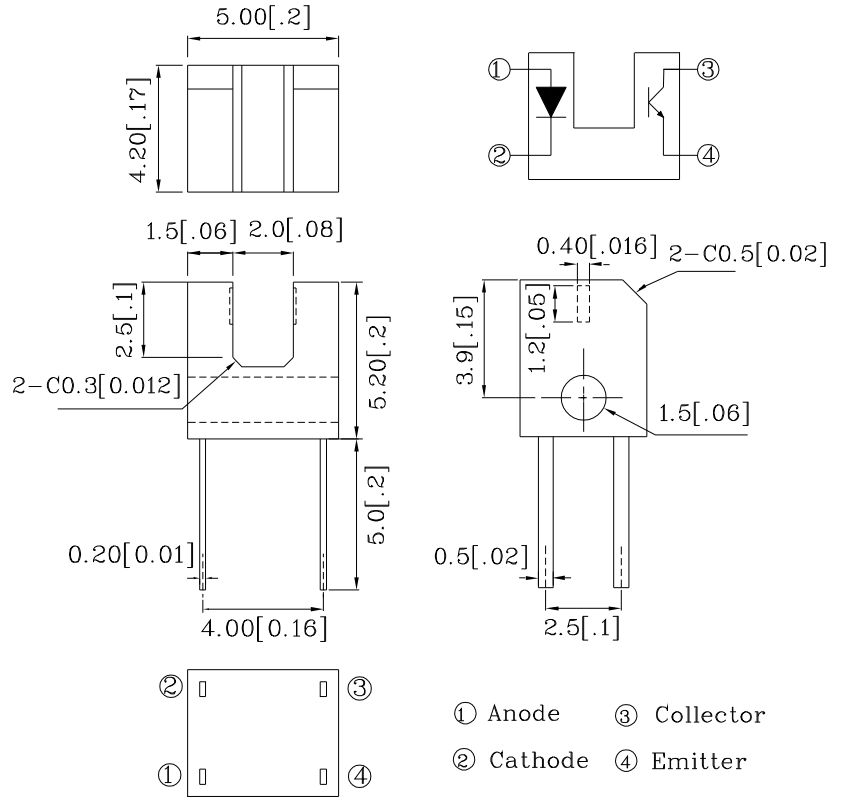


***Features**

- Ultra-compact.
- PWB mounting type package.
- High sensing accuracy (Slit width:0.4mm).
- Gap between light emitter and detector:2mm.
- RoHS compliant.

***Applications**

- Cassette tape recorders, VCRs.
- Floppy disk drives.
- Various microcomputerized control equipment.



UNIT : MM[INCH]

TOLERANCE : ± 0.25[0.01"] UNLESS OTHERWISE NOTED.

***Absolute Maximum Ratings (TA=25°C)**

Parameter		Symbol	Rating	Unit
Input	Forward Voltage	IF	50	mA
	Reverse Voltage	VR	6	V
	Power Dissipation	Pa	75	mW
	Peak Forward Current (Pulse Width ≤ 100μS, Duty Cycle=1%)	IFP	1	A
Output	Collector-emitter voltage	VCEO	35	V
	Emitter-Collector voltage	VECO	6	V
	Collector current	IC	20	mA
	Collector Power Dissipation	Pc	75	mW
Operating temperature		Topr	-25~+85	°C
Storage temperature		Tstg	-40~+100	°C
Soldering temperature (1/16 inch from body for 5 seconds)		Tsol	260	°C

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Input	Forward voltage	V_F	$I_F=20\text{mA}$	1.0	1.2	1.5	V
	Reverse current	I_R	$V_R=6\text{V}$	-	-	10	μA
	Peak Wavelength	λ_p	$I_F=20\text{mA}$	-	940	-	nm
Output	Collector dark current	I_{CEO}	$V_{CE}=20\text{V}$	-	-	100	nA
Transfer Charac-teristics	Collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C=40\mu\text{A}, I_F=10\text{mA}$	-	-	0.4	V
	Current transfer ratio	CTR	$V_{CE}=5\text{V}, I_F=5\text{mA}$	-	8	-	%
	Response time	Rise time	T_R	$V_{CE}=5\text{V}, I_C=0.1\text{mA}, R_L=1\text{K}\Omega$	-	50	150
Fall time		T_F	-		50	150	μSec

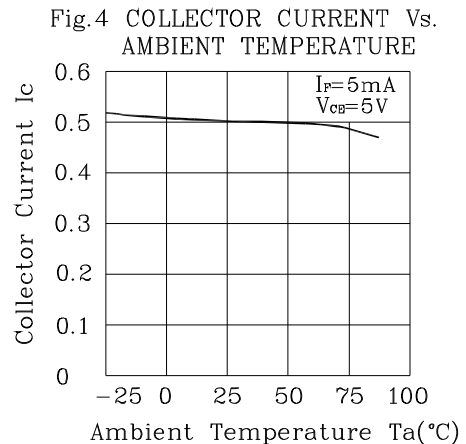
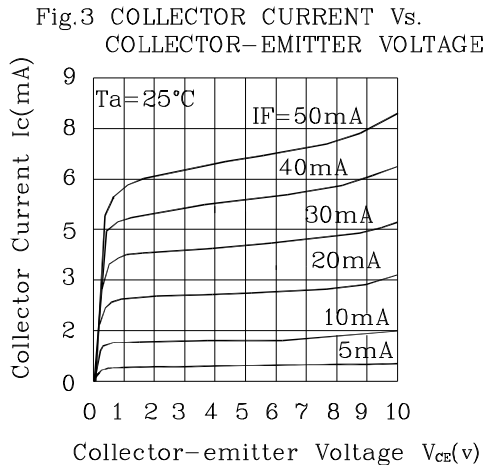
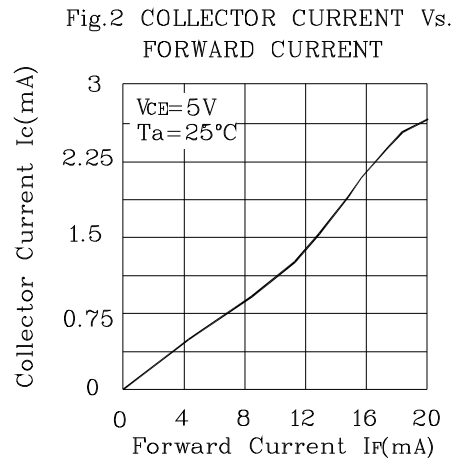
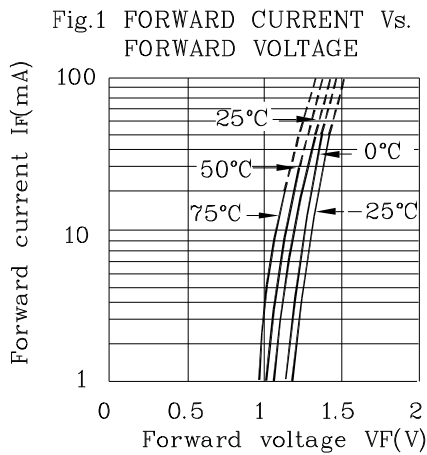


Fig.5 COLLECTOR-EMITTER SATURATION VOLTAGE Vs. AMBIENT TEMPERATURE

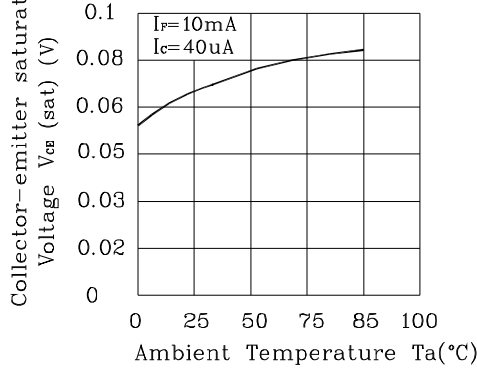


Fig.6 COLLECTOR DARK CURRENT VS. AMBIENT TEMPERATURE

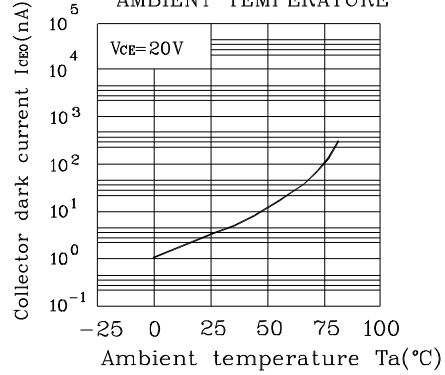


Fig.7 RELATIVE COLLECTOR CURRENT Vs. SHIELD DISTANCE (1)

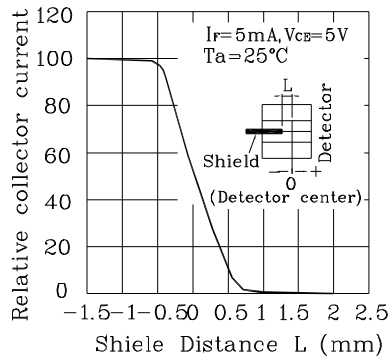


Fig.8 RELATIVE COLLECTOR CURRENT Vs. SHIELD DISTANCE (2)

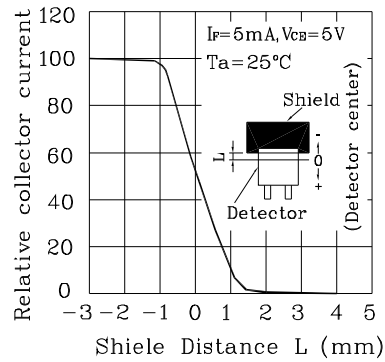
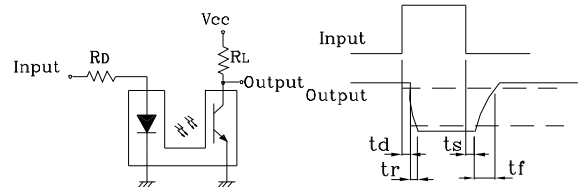
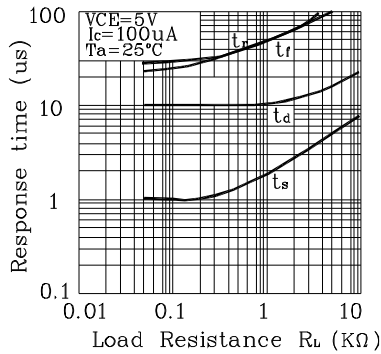
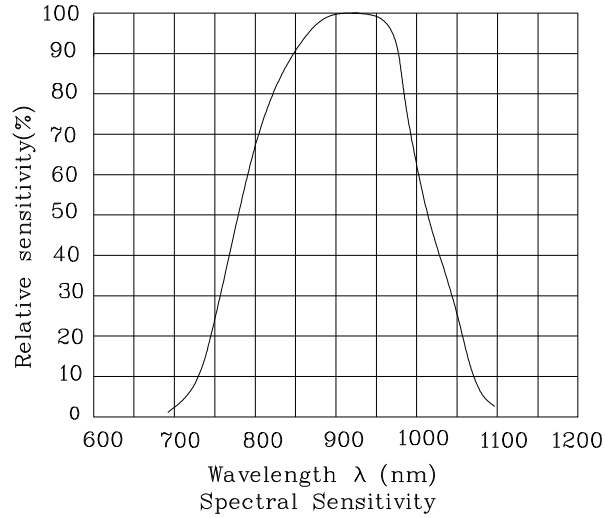


Fig.9 RESPONSE TIME Vs. LOAD RESISTANCE

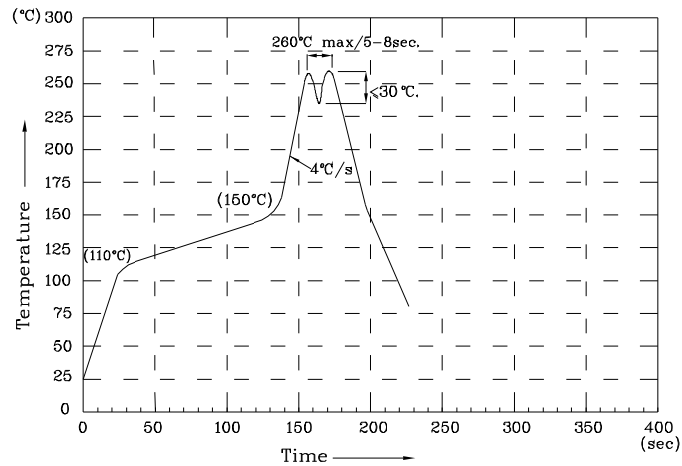


Test Circuit for Response Time

* XPI-A24



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.