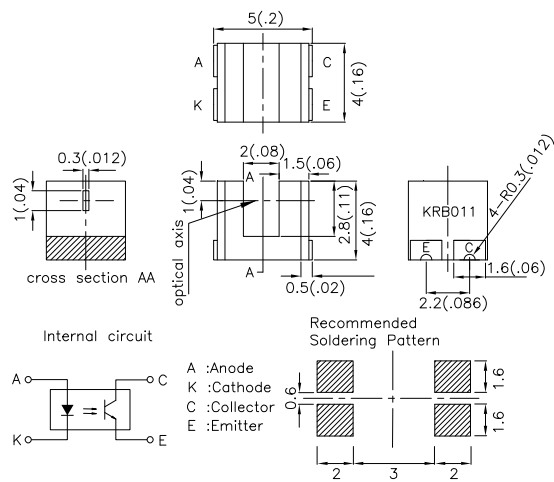


*Application

- 1.Floppy disk drives,Camera.
- 2.Various microcomputerized control equipment.

*Dimensions

Note:All units are in millimeters unless otherwise indicated.



Unless otherwise, the tolerances are $\pm 0.15\text{mm}$.

*Features

- 1.Ultra-compact.
- 2.High sensing accuracy(Slit width:0.3mm).
- 3.Gap between light emitter and detector:2mm.
- 4.RoHS compliant.

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

Parameter		Symbol	Rating	Unit
Input	Forward current[1]	I_F	25	mA
	Reverse voltage	V_R	5	V
	Power dissipation	P_d	35	mW
Output	Collector-emitter voltage	V_{CEO}	20	V
	Emitter-collector voltage	V_{ECO}	5	V
	Collector current	I_C	20	mA
	Collector power dissipation	P_C	75	mW
Operating temperature		T_{opr}	$-30\sim+85$	$^\circ\text{C}$
Storage temperature		T_{stg}	$-40\sim+90$	$^\circ\text{C}$
Soldering temperature[2]		T_{sol}	240	$^\circ\text{C}$
Manual soldering[2]		T_{sol}	300	$^\circ\text{C}$

Notes:1.Refer to the temperature rating chart if the ambient temperature exceeds 25°C .

2.Complete soldering within 10 seconds for reflow soldering and within 3 seconds for manual soldering.

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

Parameter		Symbol	Value			Conditions
			Min.	Typ.	Max.	
Input	Forward voltage	V_F	-	1.1V	1.3V	$I_F=5\text{mA}$
	Reverse current	I_R	-	-	$10\mu\text{A}$	$V_R=5\text{V}$
	Peak Wavelength	λ_p	-	940nm	-	-
Output	Collector current	I_C	$50\mu\text{A}$	$150\mu\text{A}$	-	$I_F=5\text{mA}, V_{CE}=5\text{V}$
	Collector dark current	I_D	-	-	100nA	$V_{CE}=10\text{V}$
	Collector-emitter saturation voltage	$V_{CE(sat)}$	-	0.1V	0.4V	$I_C=50\mu\text{A}, I_F=20\text{mA}$
	Peak spectral sensitivity wavelength	λ_p	-	920nm	-	-
Rise time		t_r	-	$8\mu\text{sec}$	-	$V_{CC}=5\text{V}, R_L=1\text{K}\Omega, I_C=100\mu\text{A}$
Fall time		t_f	-	$10\mu\text{sec}$	-	

Fig.1 Forward Current vs. Forward Voltage

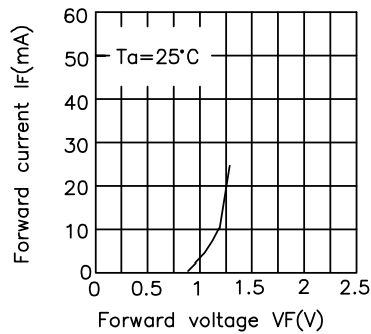


Fig.2 Collector Current vs. Forward Current

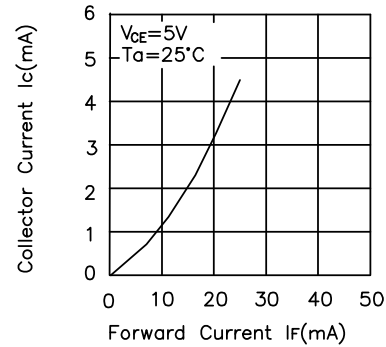


Fig.3 Collector Current vs. Ambient Temperature

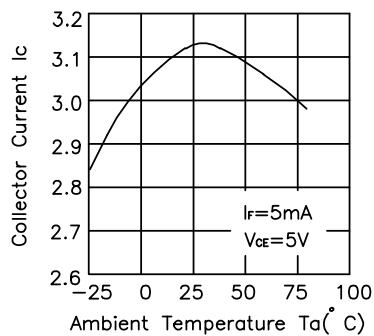


Fig.4 Collector-Emmitter Saturation Voltage vs. Ambient Temperature

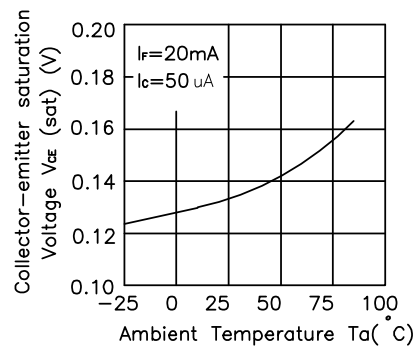


Fig.5 Forward Current vs. Collector Dissipation Temperature Rating

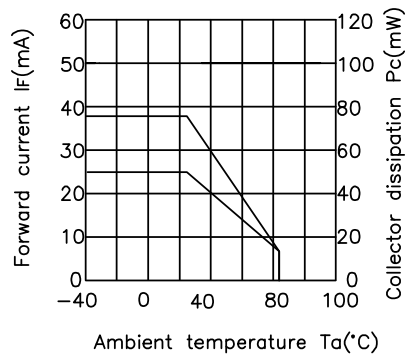


Fig.6 Forward Current vs. Collector-Emmitter Voltage

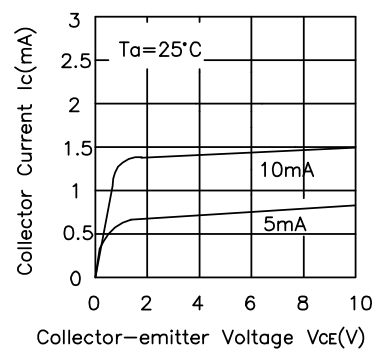


Fig.7 Relative Collector Current vs. Shield Distance(1)

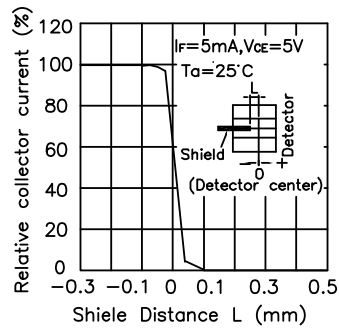


Fig.8 Relative Collector Current vs. Shield Distance(2)

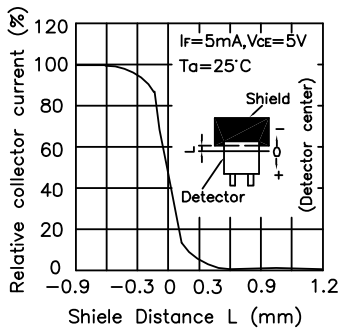
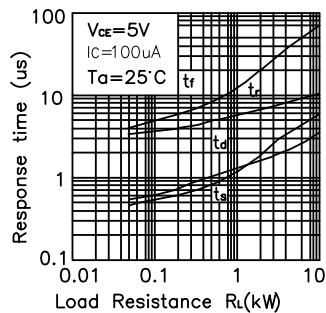
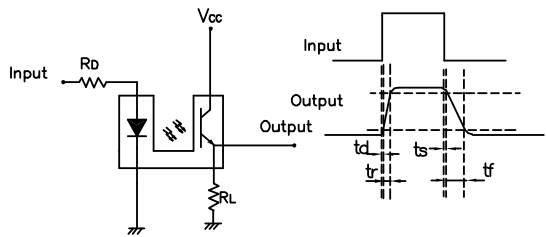


Fig.9 Response Time. vs Load Resistance



Test Circuit for Response Time



SMD TAPE SPECIFICATION
15" * 16mm

