Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Transmission type Photointerrupters Eco-Friendly type

RPI-0352E Datasheet

●Applications

• Printers

• Optical Control Equipment

• Amusement

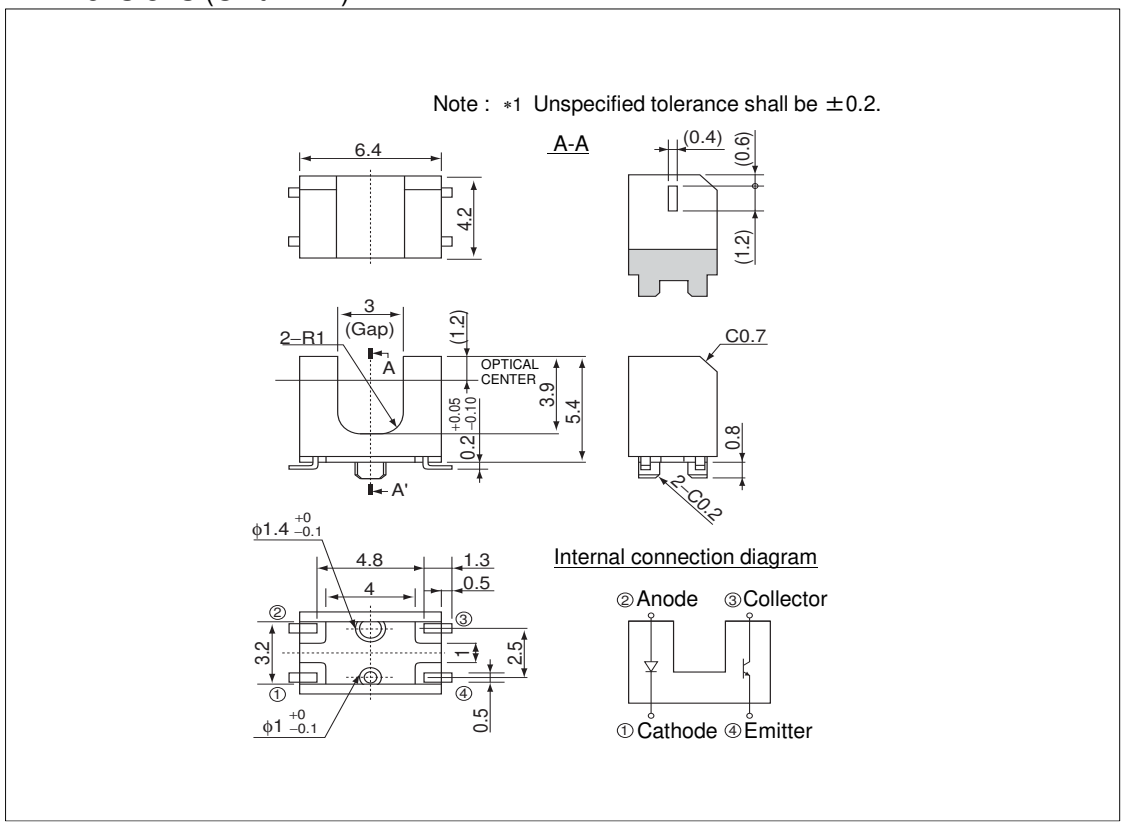
●Outline

●Features

1) Positioning pin results in high mounting accuracy

2) Gap3.0mm

●Dimensions (Unit : mm)



●Absolute maximum ratings (T_a = 25°C)

Parameter		Symbol	Value	Unit
Input (Infrared light emitting diode)	Forward current	I_F	35	mA
	Reverse voltage	V_R	5	V
	Power dissipation	P_D	70	mW
Output (Phototransistor)	Collector-emitter voltage	V_{CEO}	30	V
	Emitter-collector voltage	V_{ECO}	4.5	V
	Collector current	I_C	30	mA
	Collector dissipation	P_C	80	mW
Operating temperature		T_{opr}	−30 to +85	°C
Storage temperature		T_{stg}	−40 to +85	°C

●Electrical and optical characteristics (T_a = 25°C)

1) Input characteristics

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	V_F	I_F =10mA	1.2	1.4	1.6	V
Reverse current	I_R	V_R =5V	-	-	10	μA
Peak light emitting wavelength	λ_p	I_F =10mA	-	850	-	nm

∗ Non-coherent Infrared light emitting diode used.

2) Output characteristics

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Dark current	I_{CEO}	V_{CE} =10V	-	-	0.5	μA
Peak sensitivity wavelength	λ_p		-	800	-	nm

∗ This product is not designed to be protected against eledtromagnetic wave.

3) Transfer characteristics

Parameter		Symbol	Conditions	Values			Unit
				Min.	Typ.	Max.	
Collector current		I_C	V_{CE} =5V I_F =10mA	0.18	0.9	-	mA
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_F =10mA I_C =0.1mA	-	-	0.4	V
Response time	Rise time	tr	V_{CC} =5V, I_F =10mA R_L=100Ω	-	10	-	μs
	Fall time	tf		-	10	-	

●Electrical and optical characteristics curves

Fig.1 Relative Output Current vs.Distance (I)

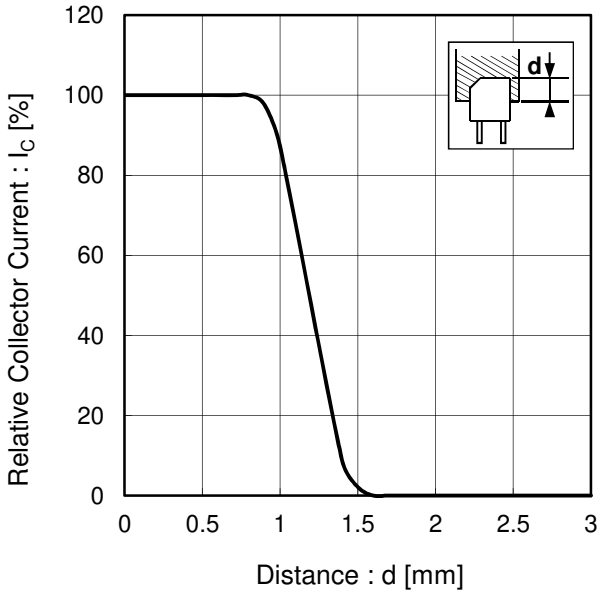


Fig.2 Relative Output Current vs.Distance (II)

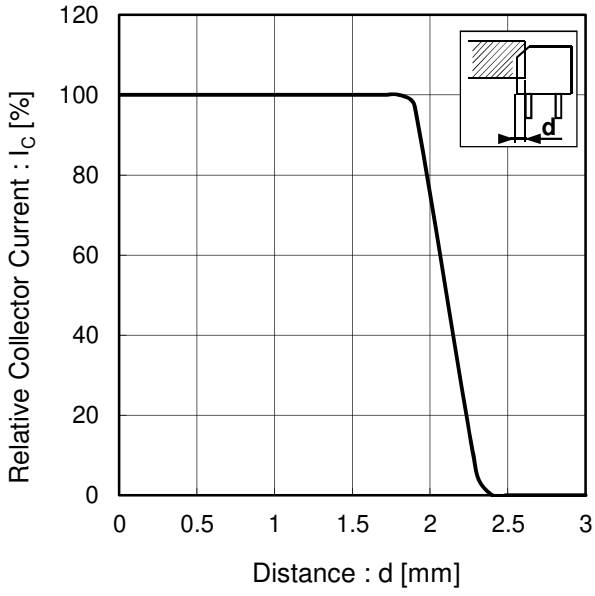


Fig.3 Forward Current Falloff

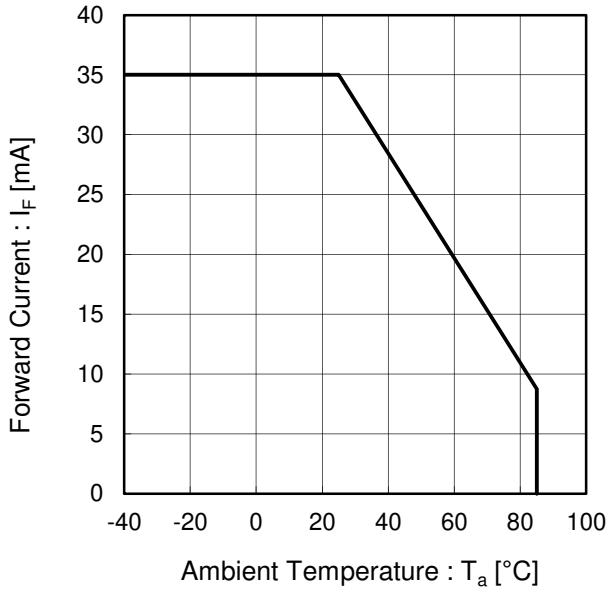
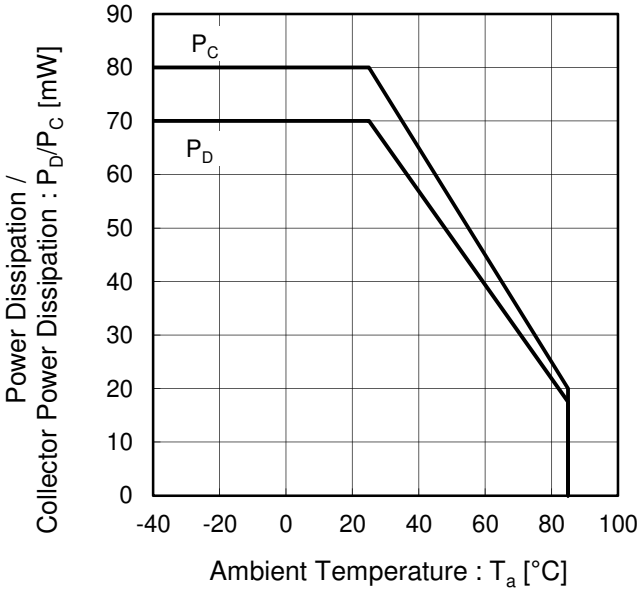


Fig.4 Power Dissipation / Collector Power Dissipation vs. Ambient Temperature



●Electrical and optical characteristics curves

Fig.5 Forward Current vs. Forward Voltage

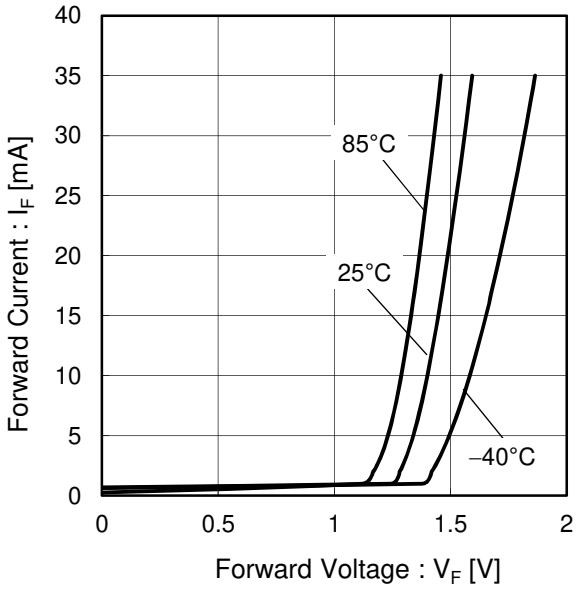


Fig.6 Collector Current vs. Forward Current

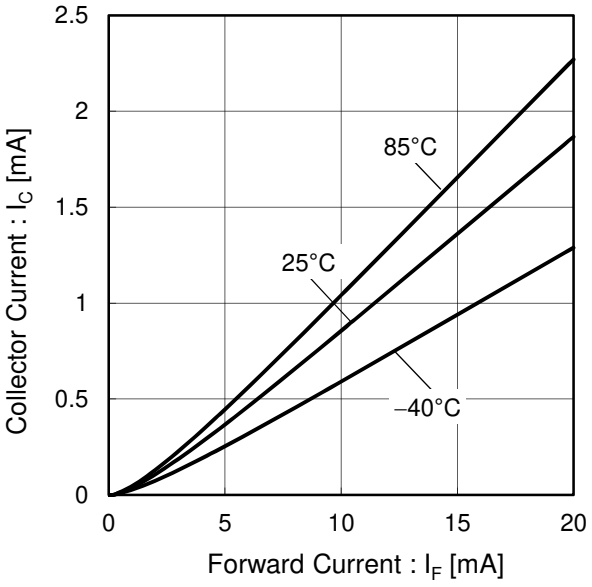


Fig.7 Relative Output vs. Ambient Temperature

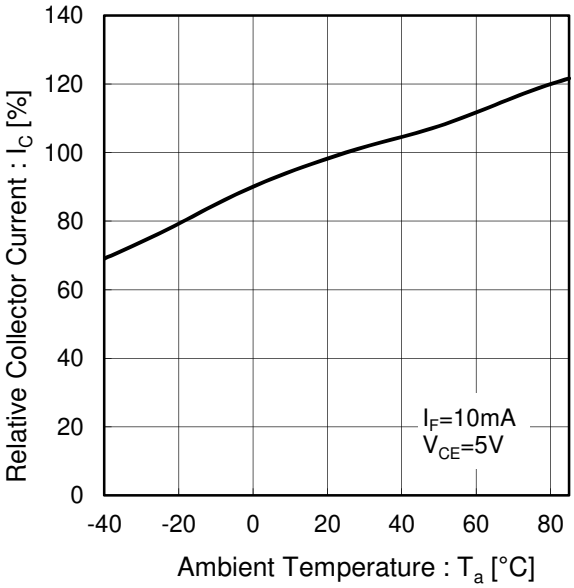
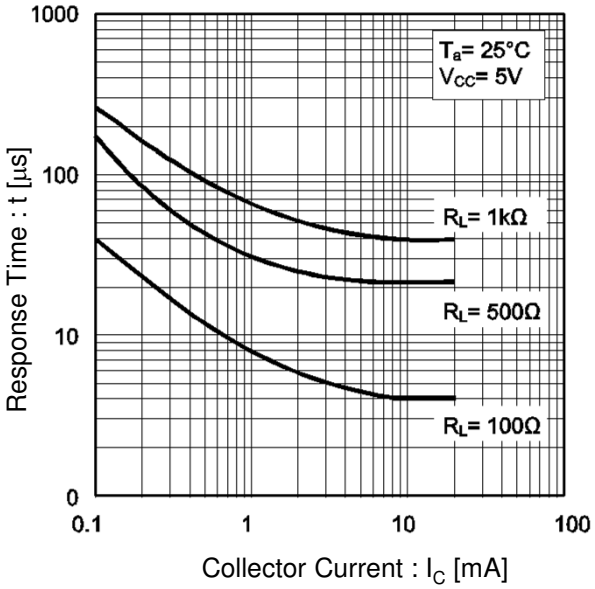


Fig.8 Response Time vs. Collector Current



●Electrical and optical characteristics curves

Fig.9 Dark Current vs. Ambient Temperature

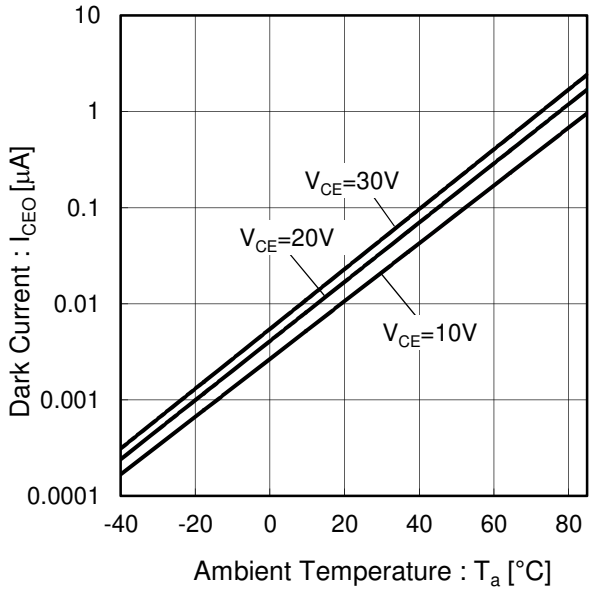
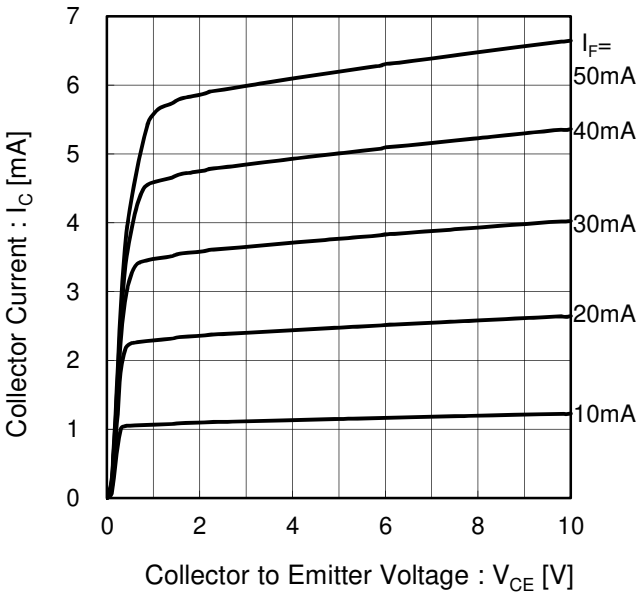


Fig.10 Output Characteristics



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