

EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

[KTIR0611S](#)

EN

This Datasheet is presented by
the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

FR

Cette fiche technique est
présentée par le fabricant

Part Number: KTIR0611S

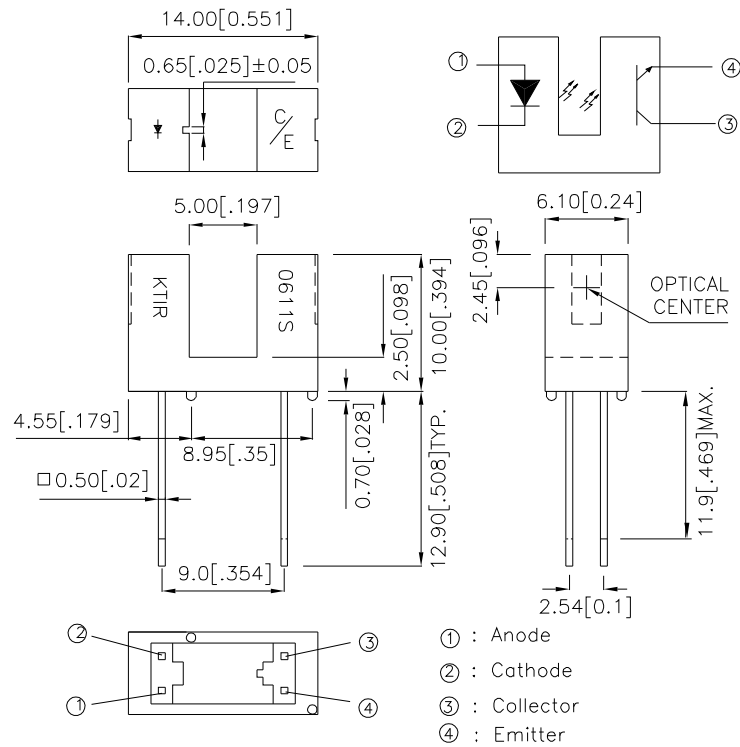
Package Dimensions

Features

- Ultra-small.
- Minimal influence from stray light.
- Low collector-emitter saturation voltage.
- RoHS Compliant.

Applications

- Optical control equipment.
- Cameras.
- Floppy disk drives.



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. The specifications, characteristics and technical data described in the data-sheet are subject to change without prior notice.

*Absolute Maximum Ratings(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward current	I_F	50	mA
	Reverse voltage	V_R	6	V
	Power dissipation	P_d	75	mW
	Peak Forward Current (Pulse Width $\leq 100\mu s$, Duty Cycle =1%)	I_{FP}	1	A
Output	Collector-emitter voltage	V_{CEO}	35	V
	Emitter-collector voltage	V_{ECO}	6	V
	Collector current	I_C	20	mA
	Collector power dissipation	P_C	75	mW
Operating temperature		T_{opr}	-25~+85	°C
Storage temperature		T_{stg}	-40~+100	°C
soldering temperature (1/16 inch from body for 5 seconds)		T_{sol}	260	°C



*Electro-optical Characteristics(Ta=25°C)

Parameter			Symbol	Conditions	Min.	TYP.	Max.	Unit
Input	Forward Voltage		V _F	I _F =20mA	1.0	1.2	1.5	V
	Reverse Current		I _R	V _R =6V	-	-	10	μA
	Peak Wavelength		λ _P	I _F =20mA	-	940	-	nm
Output	Collector dark current		I _{CEO}	V _{CE} =20V	-	-	100	nA
Transfer charact- eristics	Collector-emitter saturation voltage		V _{CE (SAT)}	I _C =1mA I _F =40mA	-	-	0.4	V
	Current transfer ratio		CTR	V _{CE} =5V I _F =20mA	-	14	-	%
	Response time	Rise time	tr	V _{CE} =2V I _C =2mA	-	5	25	μsec
		Fall time	tf	R _L =100Ω	-	4	20	μsec

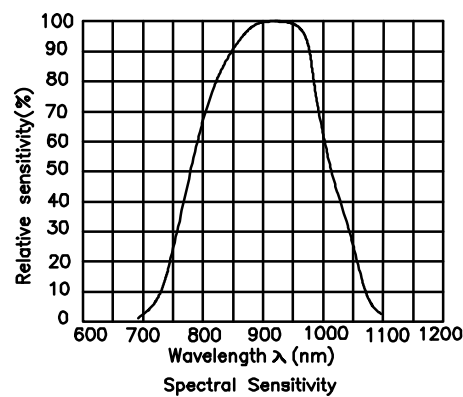


Fig. 1 Forward Current vs. Forward Voltage

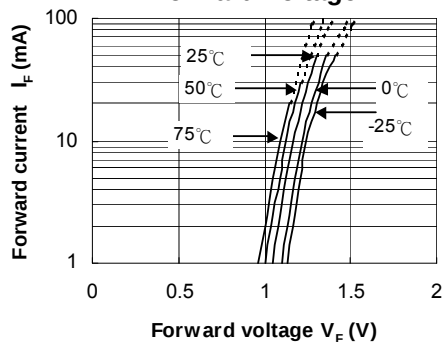


Fig. 2 Collector Current vs. Forward Current

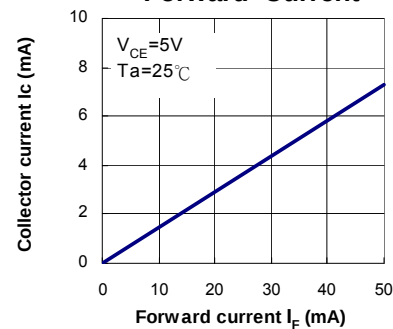


Fig. 3 Collector Current vs. Collector-emitter Voltage

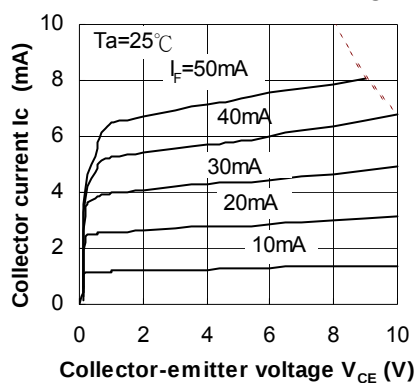


Fig. 4 Collector Current vs. Ambient Temperature

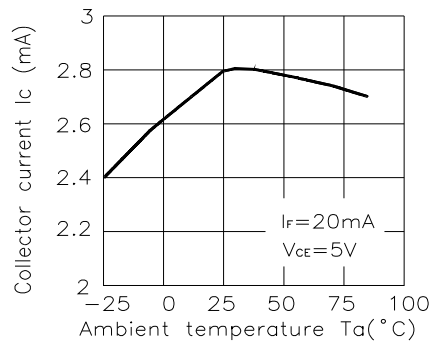


Fig.5 Collector-emitter Saturation Voltage vs. Ambient Temperature

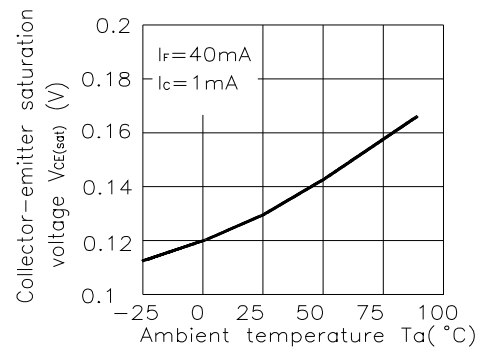


Fig.6 Relative Collector Current vs. Shield Distance (1)

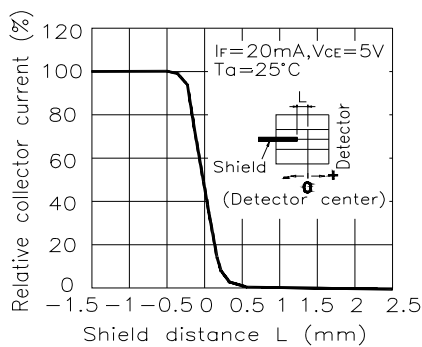


Fig.7 Relative Collector Current vs. Shield Distance (2)

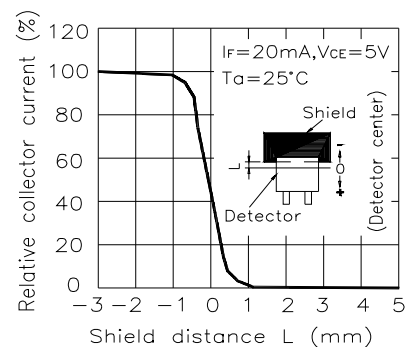
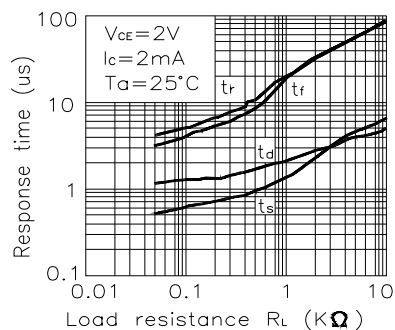
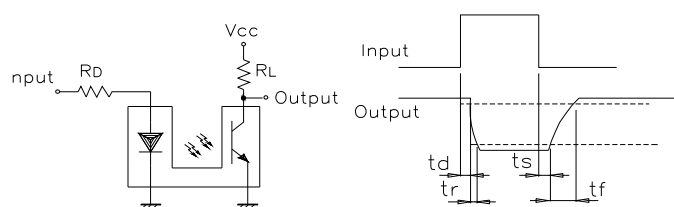


Fig.8 Response Time vs Load Resistance

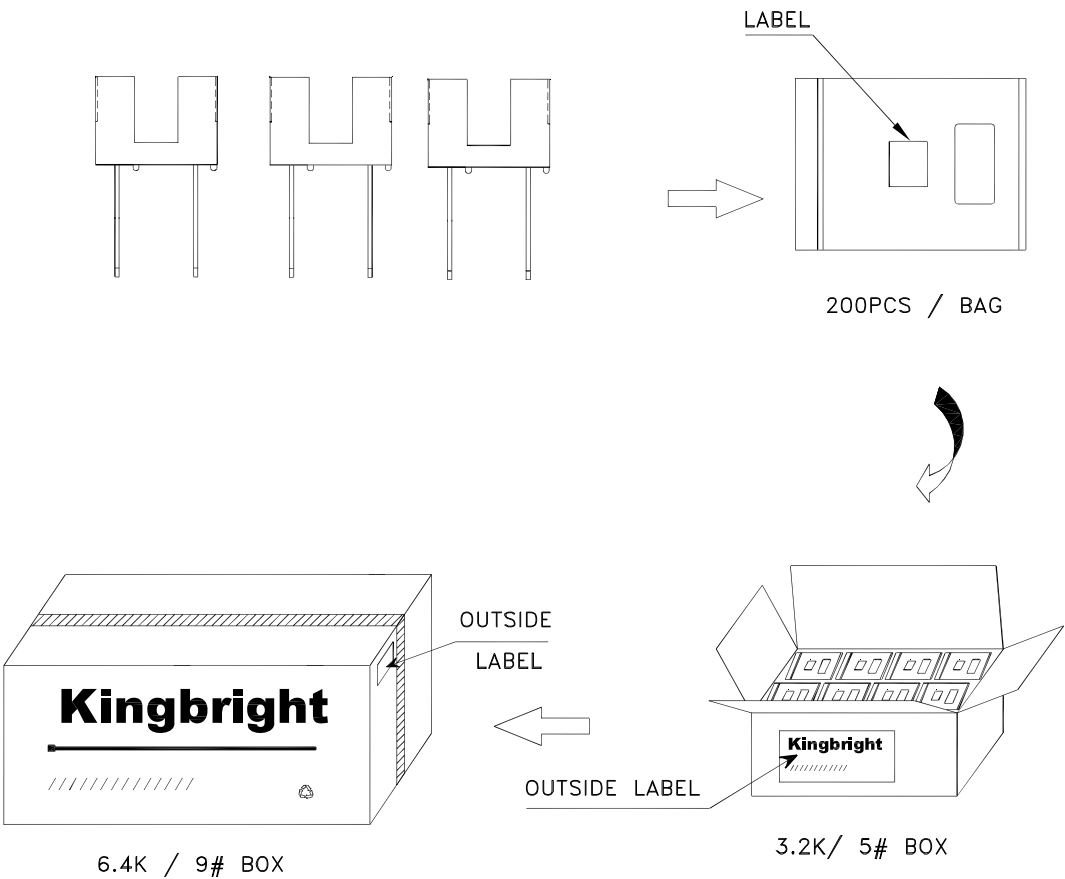


Test Circuit for Response Time



PACKING & LABEL SPECIFICATIONS

KTIR0611S



Kingbright	
P/N0: KTIR0611S	
QTY: 200 pcs	Q.C. Q C XX XX XXXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	

EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

[KTIR0611S](#)

EN

This Datasheet is presented by
the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

FR

Cette fiche technique est
présentée par le fabricant