

SPECIFICATION FOR APPROVAL

CUSTOMER:

PART NO.: TPR-105

GENIXTEK CORP..

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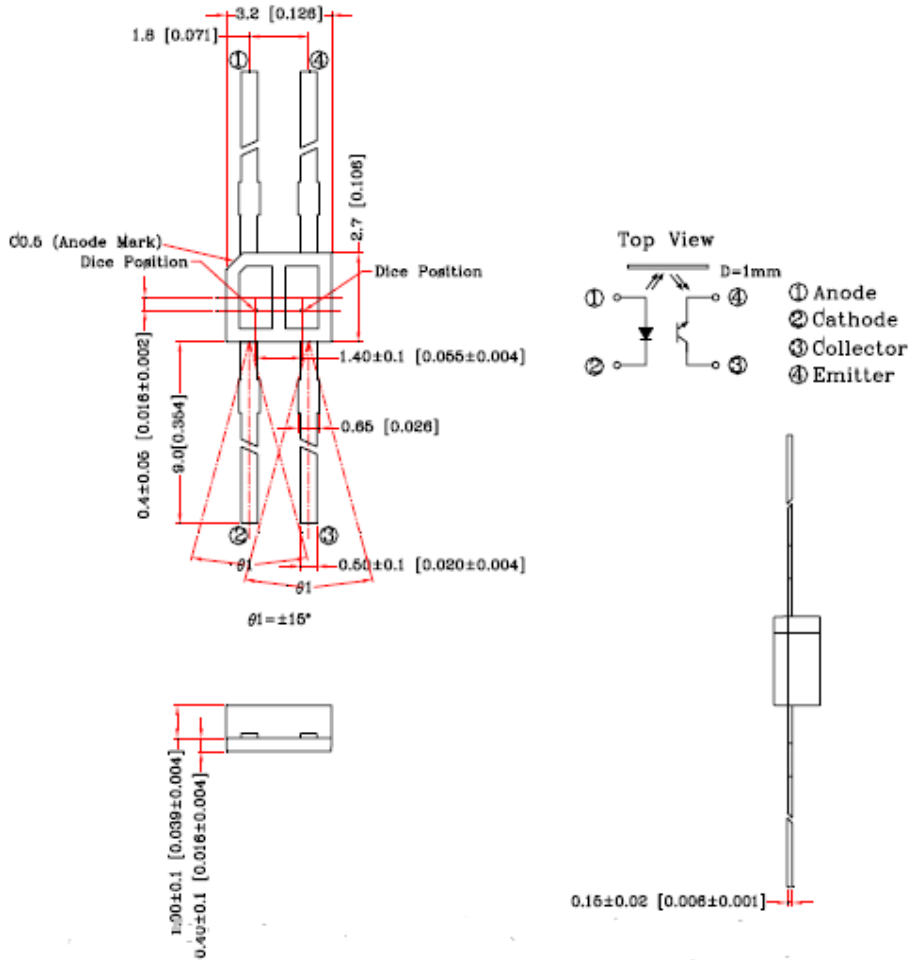
TESTED BY	CHECKED BY	APPROVED BY

ROHS COMPLIANT

DEVICE NO. : TPR-105

This photo interrupter is non-contact switching and for direct pc board or dual-in-line socket mounting. It offers Fast switching speed. And this product doesn't contain restriction substance, comply ROHS standard.

PACKAGE DIMENSIONS:



NOTE:

All dimensions are in millimeters

Tolerance is ± 0.25 mm unless otherwise noted

Lead spacing is measured where the leads emerge from the package.



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Electrical Optical Characteristics (Ta=25°C)

Parameter		Symbol	Condition	MIN.	TYP.	MAX	UNIT
Input	Forward Voltage	V _F	I _F =20mA	---	1.2	1.5	V
	Reverse Current	I _R	V _R =5V	---	---	100	μ A
	Peak Wavelength	λ _p	I _F =10mA	---	940	---	nm
Output	Dark Current	I _D	V _{CE} =10V	---	---	200	nA
	C-E Saturation Voltage	V _{CE (sat)}	I _C =0.25mA I _F =10mA	---	---	0.4	V
Light Current		I _L	V _{CE} =5V, I _F =10mA, D=1.0MM 90% Reflective white paper	80			μ A
Speed	Rise Time	T _r	I _{FP} =20mA, V _{CE} =5V	---	20	---	μ sec
	Fall Time	T _f	R _L =1000Ω	---	20	---	μ sec

Absolute Maximum Rating (Ta=25°C)

Item		Symbol	Rating	Unit
Input	Power Dissipation	P _d	75	mW
	Reverse Voltage	V _R	5	V
	Forward Current	I _F	50	mA
	Peak Forward Current (*1)	I _{FP}	1	A
Output	Collector Power Dissipation	P _C	100	mW
	Collector Current	I _C	20	mA
	C-E Voltage	V _{CEO}	30	V
	E-C Voltage	V _{Eco}	5	V
Operating Temperature		T _{opr}	-40 ~ +85	°C
Storage Temperature		T _{stg}	-40 ~ +100	°C
Soldering Temperature (*2)		T _{sol}	260	°C

(*1) t_w=100 uSec. · T=10 mSec.

(*2) t=3 Sec

※Specifications are subject to change without notice.

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Typical Electro-Optical Characteristics Curves

Fig.1 Power Dissipation vs. Ambient Temperature

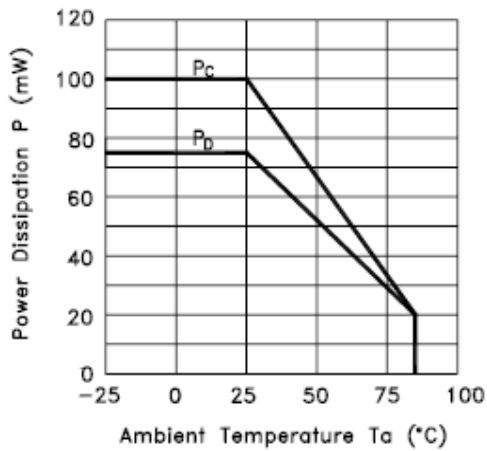


Fig.2 Forward Current vs. Forward Voltage

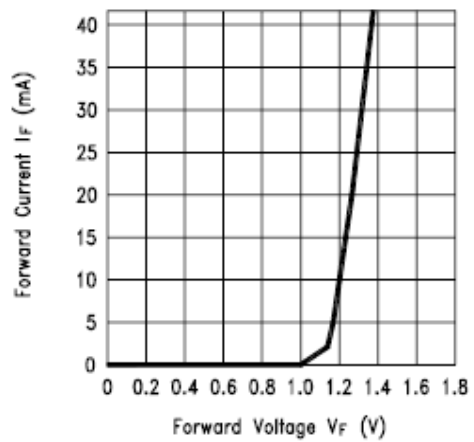


Fig.3 Collector Current vs. Collector-emitter Voltage

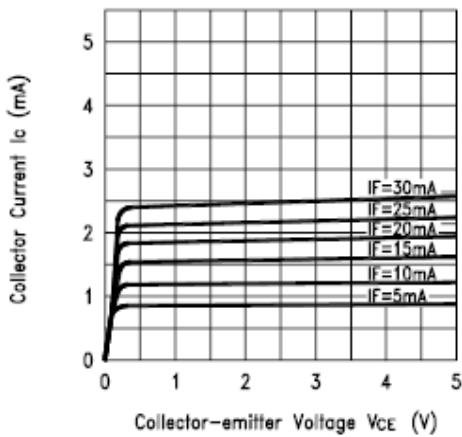
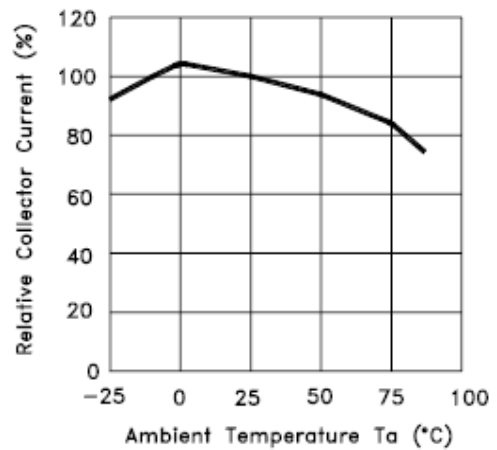


Fig.4 Collector Current vs. Ambient Temperature



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Typical Electro-Optical Characteristics Curves

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

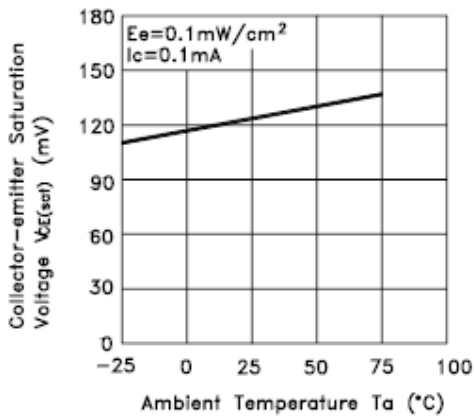


Fig.6 Response Time vs. Load Resistance

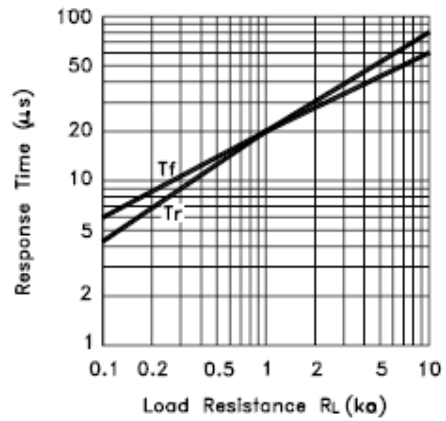
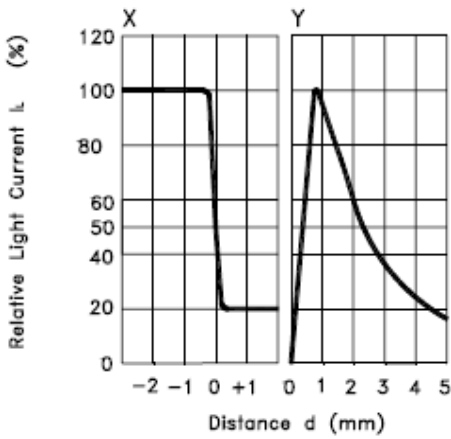


Fig.7 Sensing Position Characteristics (Typical)



Test Circuit for Response Time

