

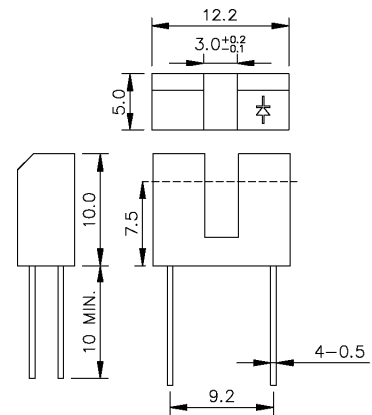
Features

1. Horizontal slit type
2. PWB direct mounting type
3. GAP between light emitter and detector : 3.0mm
4. Slit width : 0.5mm
5. With a positioning pin

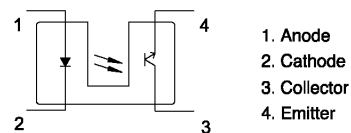
Applications

1. OA equipment, such as printer etc.
2. VCRs, cassette decks
3. Floppy disk drives

Outside Dimension:Unit (mm)



Schematic:Top View



Absolute Maximum Ratings

(Ta=25°C)

	Parameter	Symbol	Rating	Unit
Input	Forward current	I _F	50	mA
	Peak forward current *1	I _{FP}	1	A
	Reverse voltage	V _R	6	V
	Power dissipation	P _D	75	mW
Output	Collector-emitter voltage	V _{CEO}	35	V
	Emitter-collector voltage	V _{ECO}	6	V
	Collector current	I _C	20	mA
	Power dissipation	P _D	75	mW
Total power dissipation		T _{PD}	100	mW
Operating temperature		T _{OPR}	-25 to +85	°C
Storage temperature		T _{STG}	-40 to +100	°C
Soldering temperature *2		T _{SOL}	260	°C

*1 Pulse width ≤ 100 μs, duty ratio=1%

*2 For 5 seconds

Electro-optical Characteristics

(Ta=25°C)

	Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V _F	I _F =20mA	—	1.2	1.4	V
	Peak forward voltage	V _{FM}	I _{FM} =0.5A	—	3	4	V
	Reverse current	I _R	V _R =3V	—	—	10	μA
Output	Collector-emitter dark current	I _{CEO}	V _{CE} =20V	—	1	100	nA
Transfer characteristics	Collector Current	I _C	V _{CE} =5V, I _F =20mA	0.5	—	5	mA
	Collector saturation voltage	V _{CE(SET)}	I _F =40mA, I _C =0.5mA	—	—	0.4	V
	Response time (Rise)	T _R	V _{CE} =2V, I _C =2mA, R _L =100Ω	—	3	15	μs
	Response time (Fall)	T _F		—	4	20	μs

Fig.1 Forward Current vs. Ambient Temperature

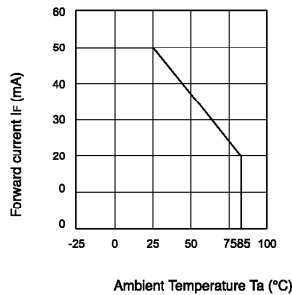


Fig.2 Collector Power Dissipation vs. Ambient Temperature

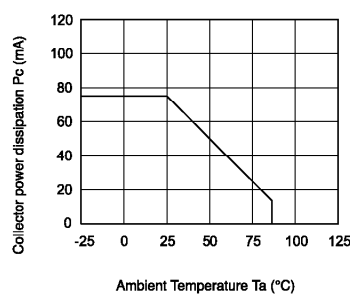


Fig.3 Peak Forward Current vs. Duty Ratio

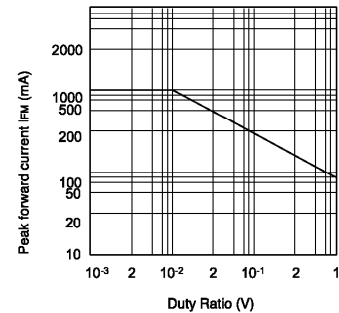


Fig.4 Forward Current vs. Forward Voltage

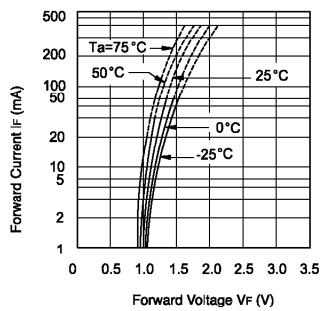


Fig.5 Collector Current vs. Forward Current

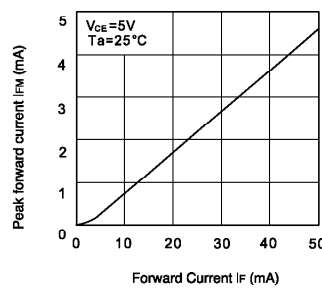


Fig.6 Collector Current vs. Collector-emitter Voltage

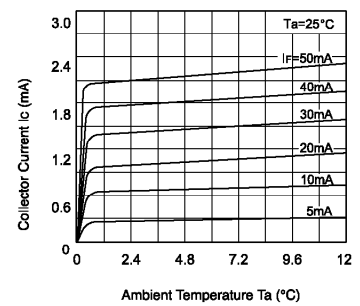


Fig.7 Collector Current vs. Ambient Temperature

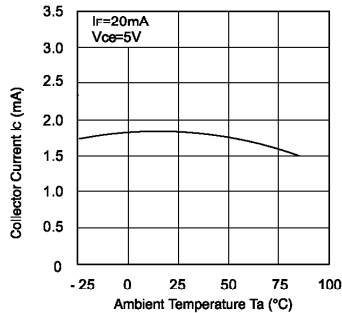


Fig.8 Collector-emitter Saturation Voltage vs. Ambient Temperature

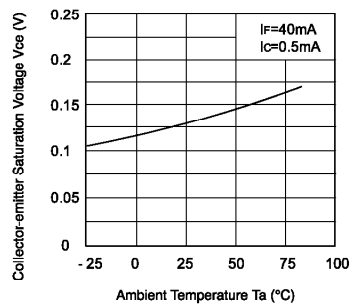
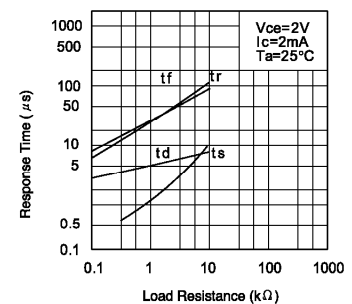


Fig.9 Response Time vs. Load Resistance



Test Circuit for Response Time

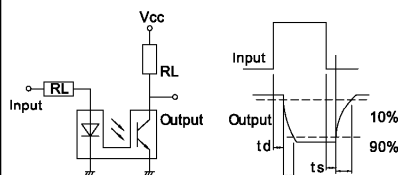


Fig.10 Relative Collector Current vs. Shield Distance (1)

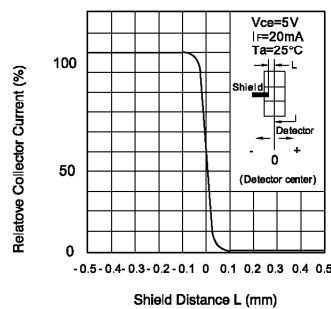


Fig.11 Relative Collector Current vs. Shield Distance (2)

