Specification

产品规格书

客户名称 (CUSTOMER):	
样品名称 (DESCRIPTION):	光电开关
型号 (Part No):	DP-ITR8402
日期 (Date):	2022-12-2

公司邮箱：josensong@163.com
销售电话：15914189777

生产部 Production Dept.	品质部 Quality Dept.	工程部 Engineering Dept.	市场部 Marketing Dept.

客户承认结果 Customer acknowledges Results	客户签名确认 Customer signature confirmation	批　准 Approval	制　定 Formulate

■ Features



. Fast response time
. High analytic
. Cut-off visible wavelength λp=940 nm
. High sensitivity

■ Descriptions

.The ITR8402 consist of an infrared emitting diode and an silicon phototransistor, encased side-by-side on converging optical axis in a black thermoplastic housing,
.The phototransistor receives radiation from the IR LED only .This is the normal situation.
. But when an object is in between phototransistor could not receives the radiation.
. For additional component information , please refer to IR928 and PT928

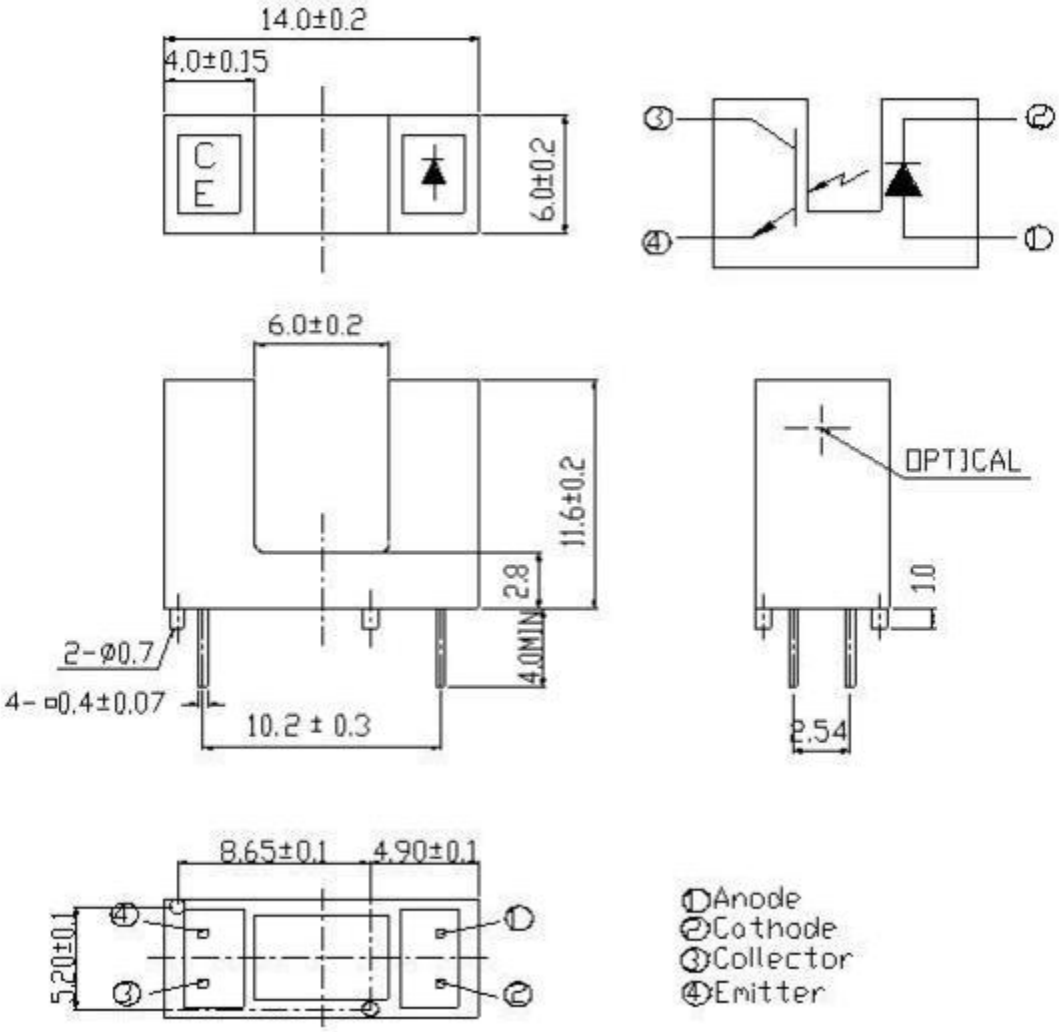
■ Applications

. Mouse Copier
.Switch Scanner
. Floppy disk driver
. Non-contact Switching
. For Direct Board

■ Device Selection Guide

Device No.	Chip Material	LENS COLOR
IR928	GaAlAs	Water Clear
PT928	Silicon	Water Clear

■ Package Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerances unless dimensions ±0.3mm.
3. Lead spacing is measured where the lead emerge from the package.

■ Absolute Maximum Ratings (Ta=25℃)

Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at(or below) 25℃ Free Air Temperature	P_d	75	mW
	Reverse Voltage	V_R	5	V
	Forward Current	I_F	50	mA
Output	Collector Power Dissipation	P_C	75	mW
	Collector Current	I_C	30	mA
	Collector-Emitter Voltage	B V_{CEO}	30	V
	Emitter-Collector Voltage	B V_{ECO}	5	V
Operating Temperature		Topr	-25~+85	℃
Storage Temperature		Tstg	-40~+85	℃
Lead Soldering Temperature (*1) (3mm from the package)		Tsol	260	℃

Note: (*1) Soldering time≤5 sec.

■ Electro-Optical Characteristics (Ta=25℃)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Input	Forward Voltage	V_F	---	1.2	1.5	V	I_F=20mA
	Reverse Current	I_R	---	---	10	μA	V_R=5V
	Peak Wavelength	λ_P	---	940	---	nm	I_F=20mA
Output	Dark C urrent	I_{CEO}	---	---	100	nA	V_{CE}=20V,Ee=0mW/cm^2
	C-E Saturation Voltage	$V_{CE(sat)}$	---	---	0.4	V	I_C=0.9mA, I_F=20mA
Transfer Characteristics	Collect Current	$I_{C(ON)}$	0.5	---	---	mA	V_{CE}=5V I_F=20mA
	Rise time	t_r	---	15	---	μsec	V_{CE}=5V
	Fall time	t_f	---	15	---	μsec	I_C=1mA R_L=1KΩ

■ Typical Electrical/Optical/Characteristics Curves for IR

Fig.1 Forward Current vs. Ambient Temperature

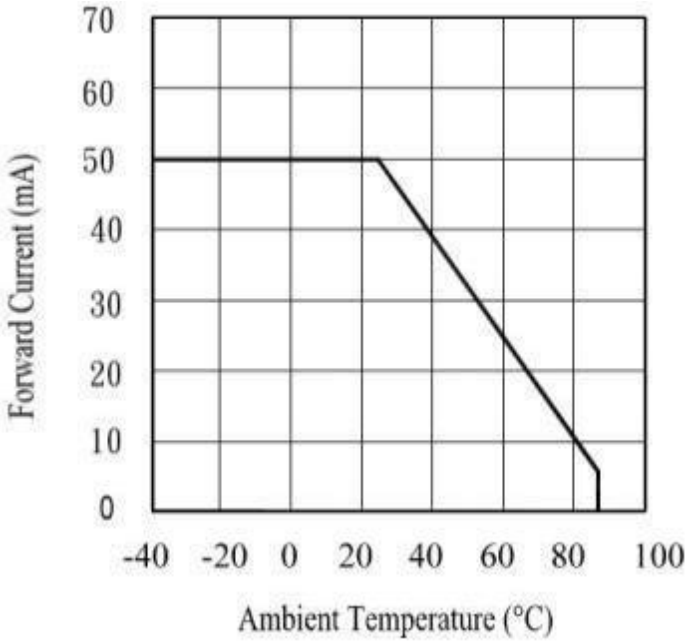
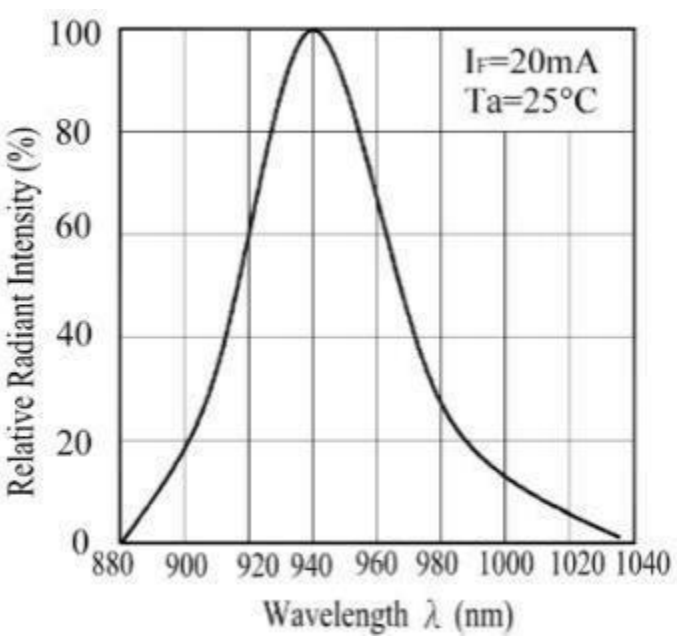
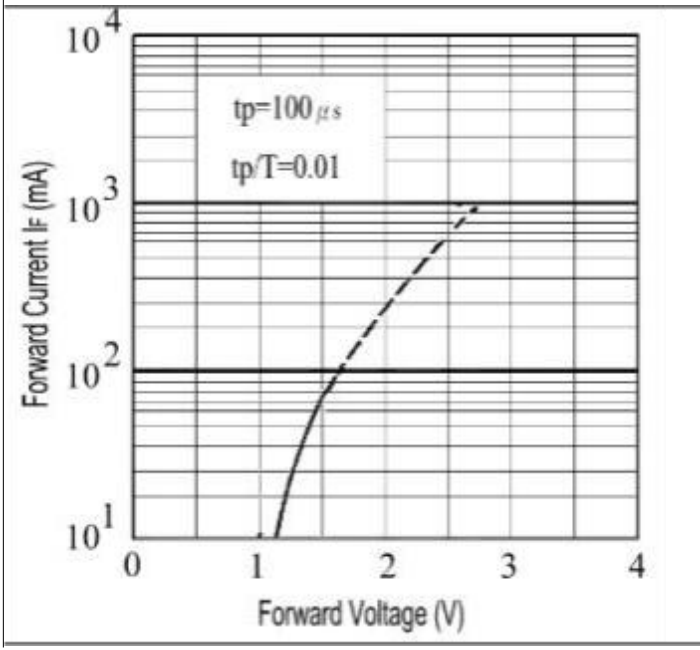


Fig.2 Spectral Distribution



Forward Current vs. Forward Voltage



Spectral

