

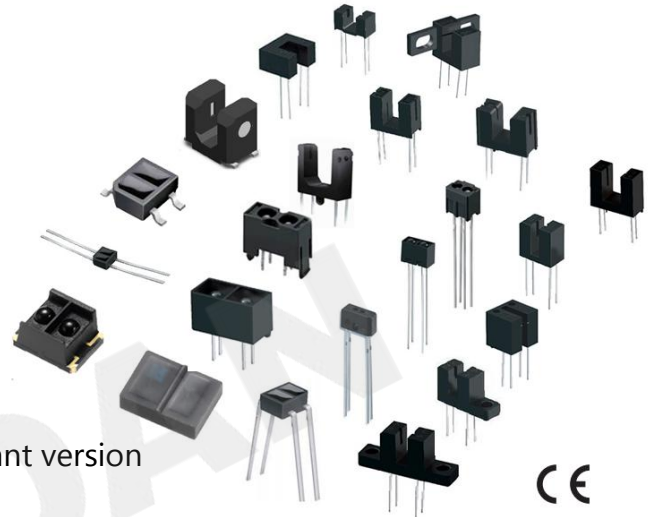
Optical Switch

Reflective Type ,Transmissive Type

EHAOAN

Features

- . Fast response time
- . High analytic
- . High sensitivity
- . Pb free
- . This product itself will remain within RoHS compliant version
- . Compliance with EU REACH



Reflective Type

Catalog













型号	图片	尺寸			距离	电压	饱和电压
		L(mm)	W(mm)	H(mm)	mm	VF(V)	VCE (sat)_Max(V)
ITR8307/TR8		2.7	3.4	1.5	1	1.2-1.6	0.4
ITR8307/S17/TR8		2.7	3.4	1.5	1	1.2-1.6	0.4
ITR8307/S18/TR8		2.7	3.4	1.5	1	1.2-1.6	0.4
ITR20510/TR8		2.7	3.4	2.2	1	1.2-1.6	--
ITR1201SR10AR-TR		3.4	2.7	1.5	1	1.2-1.4	0.4












型号	图片	尺寸			距离	电压	饱和电压
		L(mm)	W(mm)	H(mm)	mm	VF(V)	VCE (sat)_Max(V)
ITR1502SR40A/TR8		4.0	3.0	2.0	4	1.2-1.4	--
ITR1504SR10A/TR		1.9	1.4	0.6	1	1.25-1.5	--
ITR1204SR10A/TR		1.9	1.4	0.6	1	1.25-1.5	--
ITR20001/T		6.4	4.9	6.5	--	1.2-1.5	0.4
ITR9909		8.7	4.5	5.9	--	1.2-1.5	0.4
ITR9909-W		8.7	4.5	5.9	--	1.2-1.5	0.4
ITR9904		11.54	4.2	6.0	--	1.2-1.5	0.4
ITR9908		10.65	5.65	5.9	--	1.2-1.5	0.4
ITR20002		12.8	5.4	13.1	--	1.2-1.5	--
ITR20501		7.35	6.6	16.7	--	1.2-1.5	0.4

Transmissive Type

Catalog

型号	图片	尺寸			槽宽	电压	饱和电压
		L(mm)	W(mm)	H(mm)	mm	VF(V)	VCE (sat)_Max(V)
ITR1205ST11A/TR		3.1	2.0	2.7	1.1	1.2-1.4	0.4
ITR8105		9.6	5.6	9.0	2.6	1.2-1.6	0.4
ITR8010		10.3	9.22	9.25	2.1	1.2-1.5	--
ITR20403		6.4	4.2	5.4	3.0	1.23-1.6	0.4
ITR8104		18.1	6.0	10.5	3.1	1.2-1.5	0.4
ITR20005-F		12.95	23.75	10.54	3.8	1.2-1.5	0.4
ITR8102		24.4	6.0	10.4	3.1	1.2-1.5	0.4
ST150		12.6	5.8	10.0	5.0	1.2-1.5	0.4
ITR1203DT50A/TB		7.5	2.6	6.3	5.0	1.18-1.4	0.4
ITR9707		12.8	6.4	6.9	5.0	1.2-1.5	0.4
ITR9606-F		14.0	6.0	10.0	5.0	1.2-1.5	0.4

型号	图片	尺寸			槽宽	电压	饱和电压
		L(mm)	W(mm)	H(mm)	mm	VF(V)	VCE (sat)_Max(V)
ITR9608-F		13.0	6.0	10.0	5.0	1.2-1.5	0.4
ITR9702-F		13.0	11.0	6.0	5.0	1.2-1.5	0.4
ITR9813		20.1	6.2	11.0	5.0	1.2-1.6	--
ITR8402-F-A		14.0	6.0	11.6	5.0	1.2-1.5	0.4
YC1602		9.8	4.0	6.0	2.6	1.2-1.5	0.4
YC1602-1		9.8	4.0	6.0	2.6	1.2-1.5	0.4
EL130		10.8	6.0	9.0	3.0	1.2-1.5	0.4
ES92B4		12.0	6.0	11.0	4.0	1.2-1.5	0.4
GK152(908)		12.0	18.0	10.0	4.0	1.2-1.6	0.4
GK152(928)		12.0	18.0	10.0	4.0	1.2-1.5	0.4
GK105A		13.0	6.0	11.0	5.0	1.2-1.5	0.4
ST150		12.6	5.8	10.0	5.0	1.2-1.5	0.4

型号	图片	尺寸			槽宽	电压	饱和电压
		L(mm)	W(mm)	H(mm)	mm	VF(V)	VCE (sat)_Max(V)
H42B6		14.0	6.0	11.58	6.0	1.2-1.5	0.4
ITR0198		14.0	6.0	11.5	6.0	1.2-1.6	0.4
TP808		14.0	6.0	12.0	6.0	1.2-1.5	0.4
ITR180		18.0	6.0	13.3	8.0	1.2-1.6	0.4
ITR181		28.0	6.0	11.0	8.0	1.2-1.6	0.4
ITR1100(908)		17.6	5.8	12.0	10.0	1.2-1.6	0.4
ITR1100(928)		17.6	5.8	12.0	10.0	1.2-1.5	0.4
ITR1102F		18.0	6.0	15.0	10.0	1.2-1.5	0.4
ITR2010		18.5	6.0	15.0	10.0	1.2-1.5	0.4
ITR1120		20.5	6.0	14.5	12.0	1.2-1.5	0.4
ITR1150		24.0	6.0	16.5	15.0	1.2-1.5	0.4

Notes

Lead Forming

1. During lead frame bending, the lead frame should be bent at a distance more than 3mm from bottom of the epoxy.

Note: Must fix lead frame and do not touch epoxy before bending to avoid Photo Interrupter broken.

2. Lead forming should be done before soldering.

3. Avoid stressing the Photo Interrupter package during leads forming. The stress to the base may damage the characteristics of Photo Interrupter, or it may break the Photo Interrupter.

4. Cut the Photo Interrupter lead frame at room temperature. Cutting the lead frame at high temperatures may cause failure of the Photo Interrupter.

5. When mounting the Photo Interrupter onto a PCB, the PCB holes must be aligned exactly with the lead position of the Photo Interrupter. If the Photo Interrupter are mounted with stress at the leads, it causes deterioration of the epoxy resin and this will degrade the Photo Interrupter.

Storage

1. The Photo Interrupter should be stored at 10~30° C and 70%RH or less after being shipped from Everlight and the storage life limits are 3 months. If the Photo Interrupter are stored for 3 months or more, they can be stored at 10° C~25° C and 20%RH~60%RH for a year in a sealed container with a nitrogen atmosphere. After opening the package, the devices must be stored at 10° C~25° C and 20%RH~60%RH, and suggested to be used within 24 hours or as soon as possible. Besides, suggest that the remaining devices seal in the package bag as soon as possible please.

2. Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation can occur.

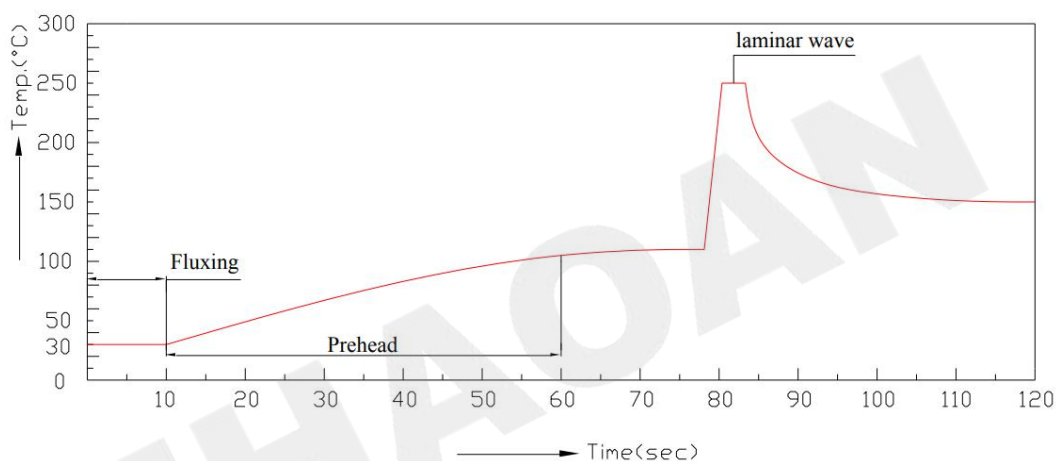
Soldering

1. Careful attention should be paid during soldering. When soldering, leave more than 3mm from solder joint to epoxy bulb, and soldering beyond the base of the tie bar is recommended.

2. Recommended soldering conditions:

Hand Soldering		DIP Soldering	
Temp. at tip of iron	300° C Max. (30W Max.)	Preheat temp.	100° C Max. (60 sec Max.)
Soldering time	3 sec Max.	Bath temp. & time	260 Max., 5 sec Max
Distance	3mm Min.(From solder joint to epoxy bulb)	Distance	3mm Min. (From solder joint to epoxy bulb)

3. Recommended soldering profile



4. Avoiding applying any stress to the lead frame while the Photo Interrupter are at high temperature particularly when soldering.

5. Dip and hand soldering should not be done more than one time

6. After soldering the Photo Interrupter, the epoxy bulb should be protected from mechanical shock or vibration until the Photo Interrupter return to room temperature.

7. A rapid-rate process is not recommended for cooling the Photo Interrupter down from the peak temperature.

8. Although the recommended soldering conditions are specified in the above table, dip or hand soldering at the lowest possible temperature is desirable for the Photo Interrupter.

9. Wave soldering parameter must be set and maintain according to recommended temperature and dwell time in the solder wave.

Cleaning

Do not clean the Photo Interrupter by the ultrasonic.

Heat Management

1. Heat management of Photo Interrupter must be taken into consideration during the design stage of Photo Interrupter application. The current should be de-rated appropriately by referring to the de-rating curve found in each product specification.
2. The temperature surrounding the Photo Interrupter in the application should be controlled.

ESD (Electrostatic Discharge)

1. The products are sensitive to static electricity or surge voltage. ESD can damage a die and its reliability.
2. When handling the products, the following measures against electrostatic discharge are strongly recommended:

Eliminating the charge Grounded wrist strap, ESD footwear, clothes and floors Grounded workstation equipment and tools ESD table/shelf mat made of conductive materials

3. Proper grounding is required for all devices, equipment, and machinery used in product assembly. Surge protection should be considered when designing of commercial products.

4. If tools or equipment contain insulating materials such as glass or plastic, the following measures against electrostatic discharge are strongly recommended:

Dissipating static charge with conductive materials

Preventing charge generation with moisture

Neutralizing the charge with ionizers