

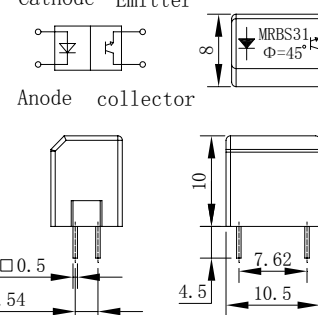
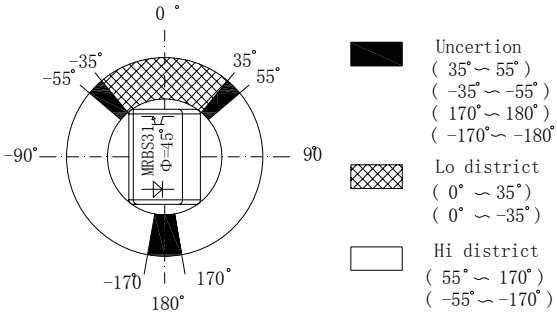
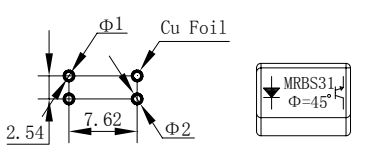
## ● APPLICATIONS

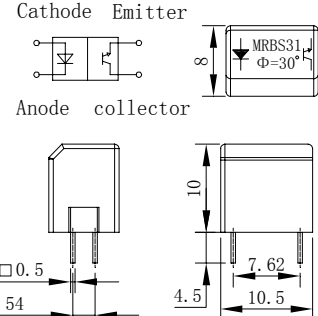
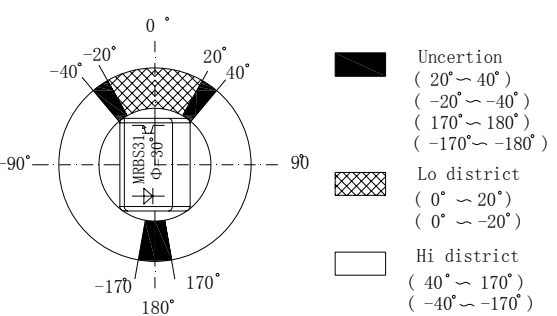
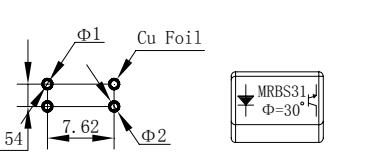
- 1、Tilt Detecting within a 360° radius: LCD Monitor Rotation Home Appliance Tilt off function
- 2、Slight Vibration Detecting: Earthquake Alarm

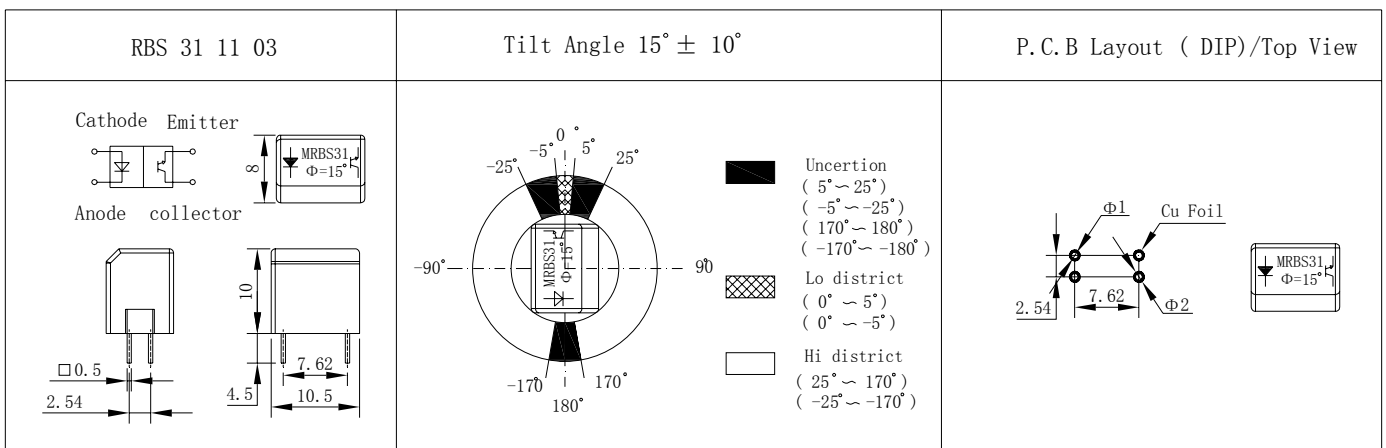
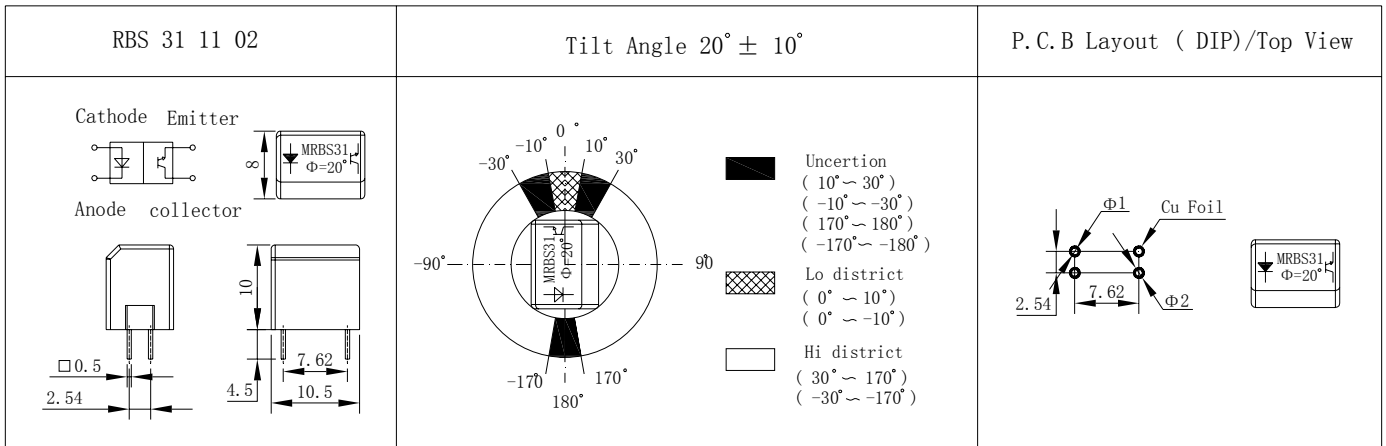
## ● FEATURES

- 1、Small size & compact space.
- 2、Housing made of high insulation plastic material, free from electric conduction and rust problem.
- 3、Using photo transistors to detect signal makes the signal highly reliable and stable.
- 4、All plastic material subject to industrial purpose meets with UL94V-0 grade; high temperature and fireproof function.
- 5、Suitable to IC trigger signal
- 6、Suitable to vertical PCB.
- 7、Tilt Angles : 15°、20°、30° and 45° within a 360°radius. °
- 8、Complete replacement of mercury switch and meet with environmental protection.

## ● DIMENSIONS / OPERATION / P.C.B.LAYOUT (Unit : mm , Tolerance : ±0.25mm)

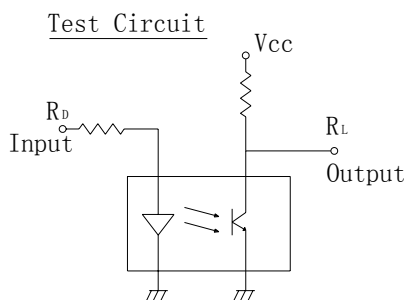
RBS 31 11 00	Tilt Angle 45° ± 10°	P. C. B Layout ( DIP)/Top View
<p>Cathode Emitter</p>  <p>Anode collector</p>		

RBS 31 11 01	Tilt Angle 30° ± 10°	P. C. B Layout ( DIP)/Top View
<p>Cathode Emitter</p>  <p>Anode collector</p>		



## ● ELECTRICAL CHARACTERISTICS

ITEMS	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
INPUT						
Forward Voltage	V <sub>f</sub>	-	1.2	1.5	V	I <sub>f</sub> = 20mA
Reverse Current	I <sub>r</sub>	-	-	10	μA	V <sub>r</sub> = 5V
OUT PUT						
Dark Current	I <sub>ceo</sub>	-	-	2	μA	V <sub>ce</sub> = 10V
COUPLED						
Output Current	I <sub>c</sub>	0.5	5.0	-	mA	V <sub>ce</sub> = 5V
Rise Time	T <sub>r</sub>	-	5.0	-	μs	I <sub>c</sub> = 0.8mA V <sub>cc</sub> = 30 V
Fall Time	T <sub>f</sub>	-	5.0	-	μs	R <sub>L</sub> = 1KΩ



### ● MECHANICAL CHARACTERISTICS

1	Temperature Range	Operating : -25°C to 85°C Storage : -40°C to 85°C
2	Pull Force of Terminal	500 gf, 1minute
3	Operation Life	30,000 Hours
4	Humidity	95% RH 40°C , 96 hrs.
5	Solder ability	After flux 260±5°C for 5±0.5°C Seconds 95% coverage

### ● BILL OF MATERIAL

1	Housing	Class-Fiber Polyamide, UL94-0
2	Base	Class-Fiber Polyamide, UL94-0
3	Ball	Stainless Steel
4	Infrared Emitting Diodes	
5	Silicon Photo Transistors	
6	Inside part	Copper Alloy, Nickel Plated

### ● PACKAGE

	Part Number	Package	Quantity	Total	Size
1	MRBS311100	PE Bag	250PCS	250PCS	12.7×17.8 cm
	MRBS311101	Inner Box	8PE Bags	2,000PCS	36×20×9cm
	MRBS311102				
	MRBS311103	Carton	3 Boxes	6,000PCS	36×28×23 cm
2	MRBS311100	IC tube	48PCS	48PCS	52.5 cm
	MRBS311101	Inner Box	84 tubes	4,032PCS	54×13×13 cm
	MRBS311102				
	MRBS311103	Carton	4 Boxes	16,128PCS	55×29×29 cm

Minimum Order Quantity: One Bag / One Box (84 tubes)

### ● NOTE

1. Strongly recommend that using 20mA as input current.
2. For the continued products improvement as one of the company policy, specifications may change or update without notice. The latest information can be obtained through our sales offices. Normally, all products are supplied under our standard conditions.

### ● PRECAUTIONS FOR USE

1. The product is used mainly in electronic devices such as automotive devices, visual devices, home electrical appliances, information devices and communication settings. If the products is intended to be used for other endurance equipments requiring higher safety and reliability such as life support system, space and aviations devices, disaster and safety system, it's necessary to make verification of conformity or contact us for the details before using.
2. Don't try to clean the switch with a solvent or similar substance after the soldering process.
3. The switch might be damaged if using the water-soluble flux.