



## PHOTODIODE

### 1.ELEMENT APPEARANCE

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Model No.	Lighting Color	Resin Color
RT5-2319SDTS	Non-Visible	Water Clear

### 2.ABSOLUTE MAXIMUM RATINGS AT Ta=25°C

Characteristic	Symbol	Rating	Unit
Operating temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-40 to +100	°C
Lead soldering temperature (3mm from body ) 260°C for 5sec.			

### 3.ELECTRO-OPTICAL CHARACTERISTICS AT Ta=25°C

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	VBR	IR=100μA	35			V
Reverse dark current	ID	VR=10V			100	nA
Light current	IL	Ee=0.5mW/cm <sup>2</sup> @940nm		60		μA
Junction capacitance	Cj	VR=3V f=1MHZ		20		pF
Wavelength of the max. sensitivity	λp			940		nm
Radiant sensitivity area	A			4.12		mm <sup>2</sup>
Turn-on/Turn-off Time	ton/toff	VR=5V · RL= 50Ω λ=850nm		110/60		ns
Viewing angle	2θ 1/2			55		deg.

※ Light current Measurement allowance is ±15%

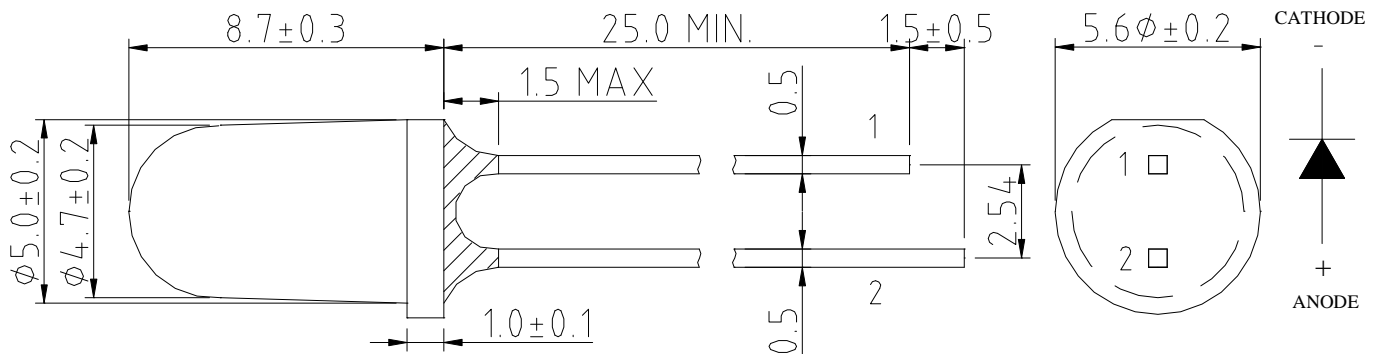
### 4.DIMENSIONS UNIT : m/m

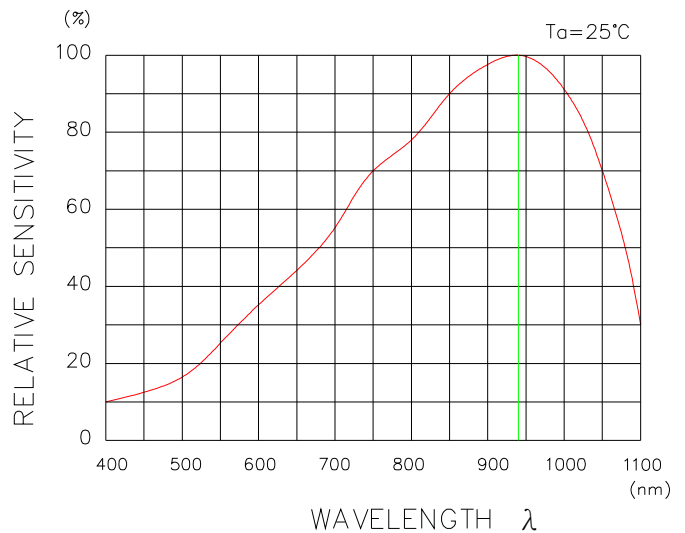
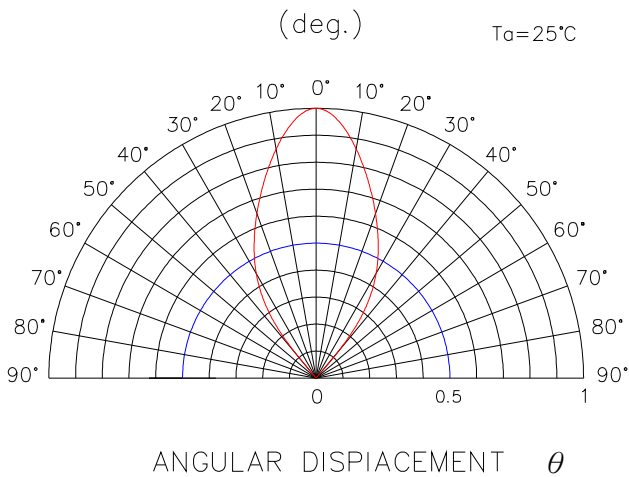
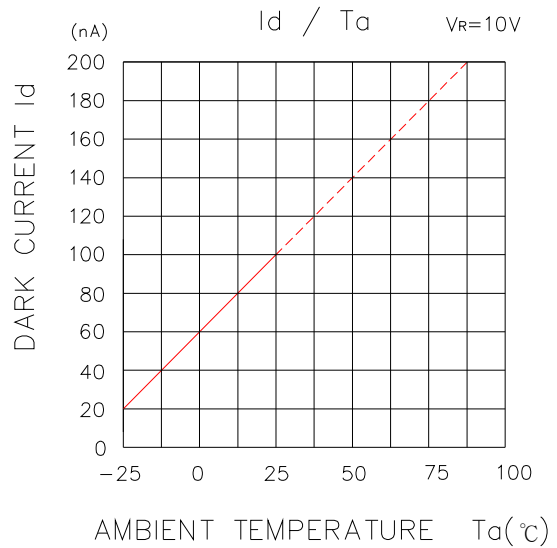
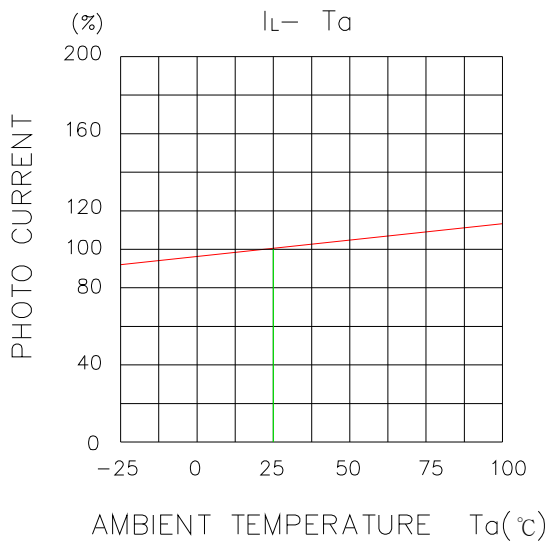
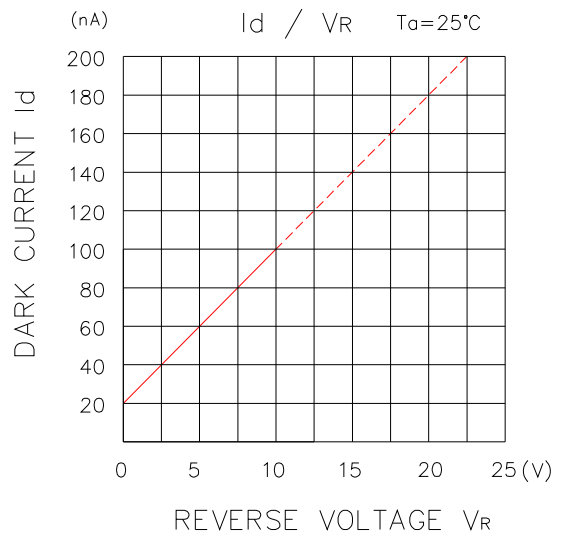
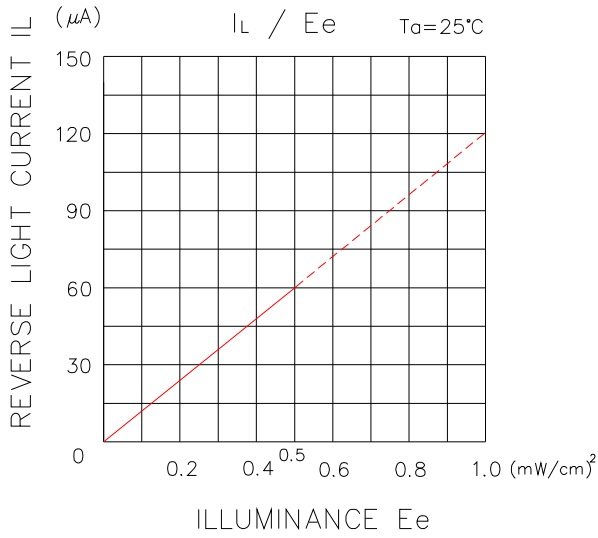
SIGN :

1.CATHODE

Tolerance is ±0.25mm unless otherwise specified.

2.ANODE







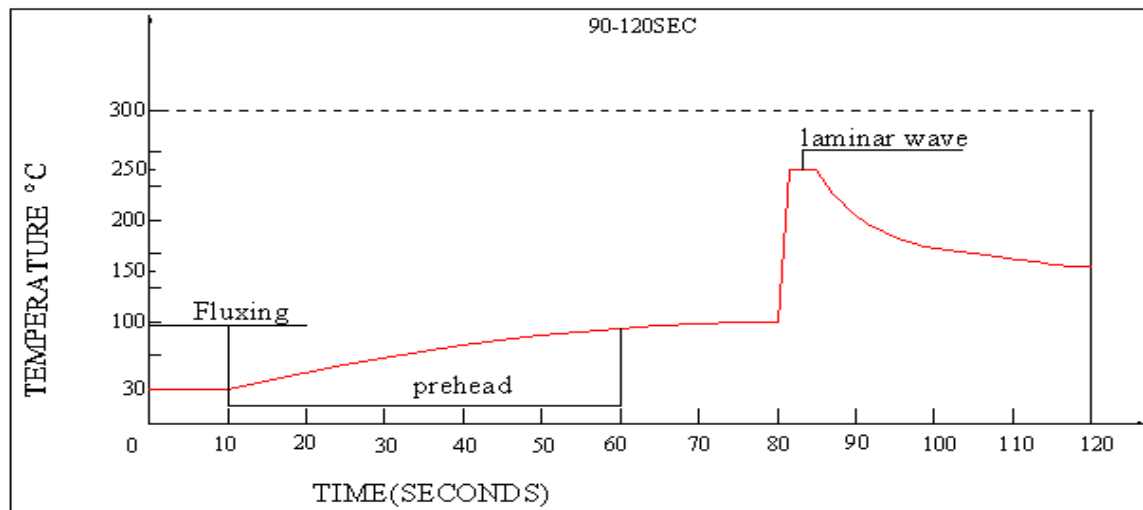
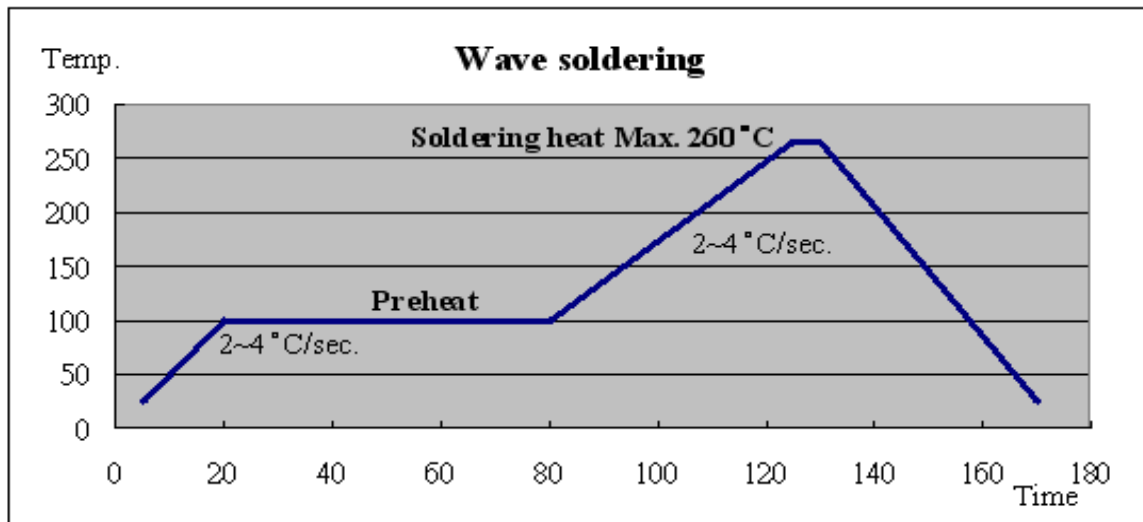
## Soldering Profile

**Compliant with the following condition :**

- (1) Leaded quantity of product below 100 ppm
- (2) Lead-free process

Shape	Lead Frame Type / Holder Type
Hand soldering	1.Temp.at tip of iron : 300 °C MAX(30W MAX). 2.Soldering time : 3 sec MAX. 3.Distance : 3 mm MIN (from solder joint to case)
DIP soldering	1.Preheat temp : 100 °C MAX , 60 sec MAX. 2.Bath temp : 260 °C MAX. 3.Bath time : 5 sec MAX. 4.Distance : 3 mm MIN (From solder joint to case).
Reflow soldering	NO
Shape	SMD Type
Hand soldering	1.Temp.at tip of iron : 300 °C MAX. 2.Soldering time : 3 sec MAX.
DIP soldering	1.Preheat temp. : 120-150 °C , 60-120 sec. 2.Bath temp. : 260 °C MAX. 3.Bath time : 5 sec
Reflow soldering	1.Preheat temp. : 150-180 °C , 120 sec MAX. 2.Peak temp. : 260 °C MAX. 3.Peak time : 10 sec MAX.

### **wave soldering profile :**





## Reliability Test Items

### CONDITIONS :

The reliability of products shall be satisfied with items listed below.

NO.	<u>Item</u>	Condition	Time / Cycle	Criteria	Ac / Re	Sample Quantity
1	Soldering Heat Test	260°C	5 sec	Open / Shot	0 / 1	60 pcs
2	Thermal Shock	0°C (5min) ~100°C (5min)	20 Cycles	Open / Shot	0 / 1	60 pcs
3	High Temp. Storage	100°C	1000 Hrs	Open / Shot	0 / 1	60 pcs
4	Low Temp. Storage	-40°C	1000 Hrs	Open / Shot	0 / 1	60 pcs
5	Temperature Cycle Test	-40°C ~85°C	100 Cycles , 200Hrs	Open / Shot	0 / 1	60 pcs
6	High Temp. High Humidity Test	60°C, 90% RH	1000Hrs	Open / Shot	0 / 1	60 pcs