

Photo Transistor --ORT-PT1836H2

1. Scope:

- This specification applies to NPN Photo Transistor.

2. Structure:

- Top Side : aluminium alloy
- Bottom Side : silver alloy
- Passivation : Silicon Nitride

3. Size:

- Die Size : $458\mu\text{m}\times 916\mu\text{m}\pm 30\mu\text{m}$
- Thickness : $220\mu\text{m}\pm 20\mu\text{m}$
- Pad Size:
- Base : $80\mu\text{m}\times 80\mu\text{m}\pm 10\mu\text{m}$
- Emitter : $\Phi 120\mu\text{m}\pm 10\mu\text{m}$
- Active Area : $300\mu\text{m}\times 300\mu\text{m}\pm 20\mu\text{m}$
- Pattern Drawing: fig.1.

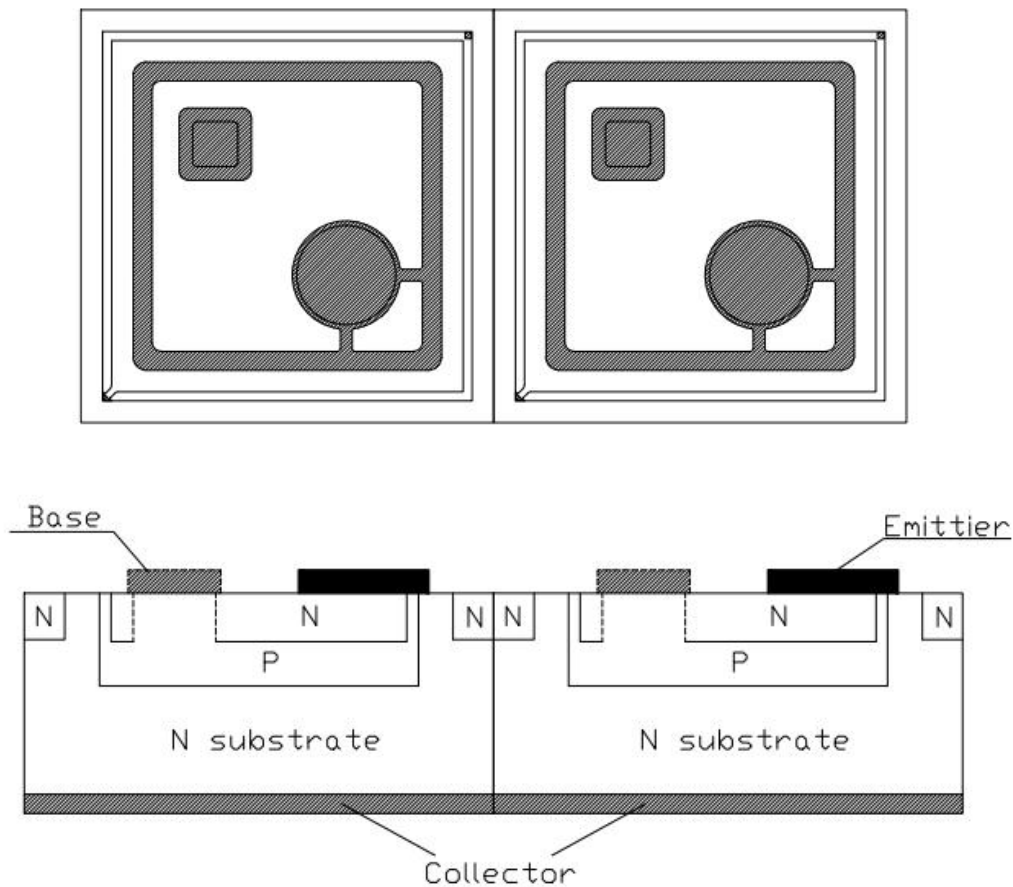


fig.1

4. Absolute Maximum Ratings (极限值) :

(Ta=+25°C)

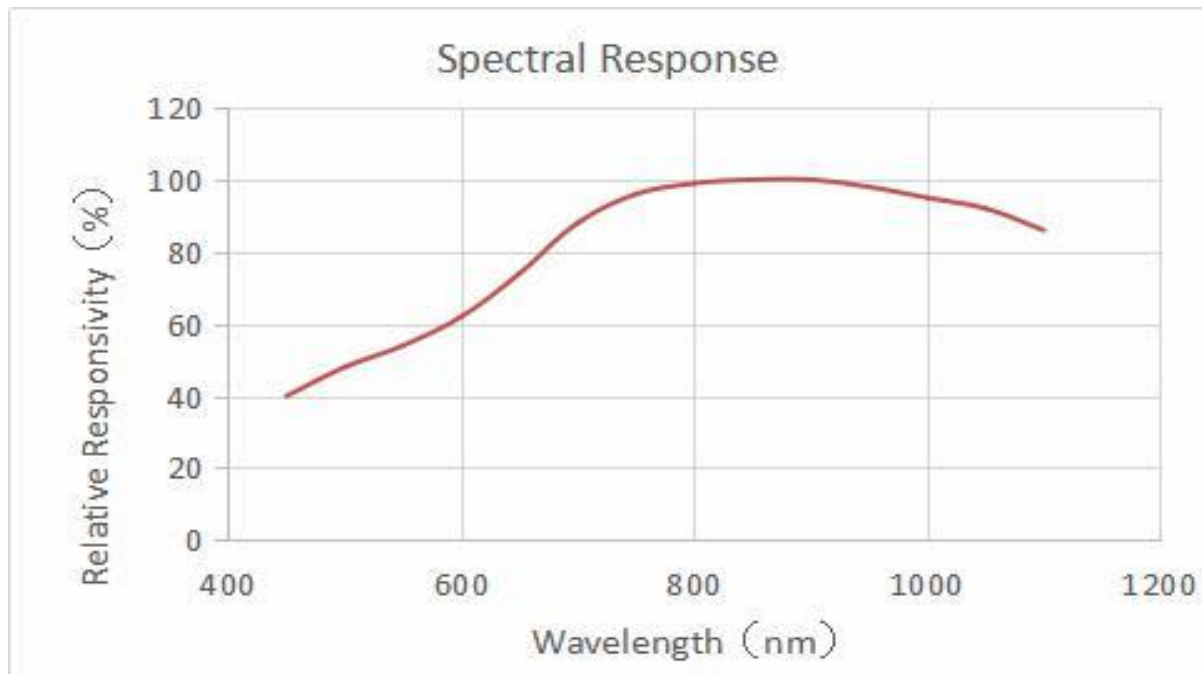
Parameter	Symbol	Maximun rating	Unit
Collecctor-Emitter Voltage	V_{CEO}	60	V
Emitter-Collector Voltage	V_{ECO}	6	V
Junction Temperature	T_J	150	°C

5. Electro-Optical Characteristics (光电性能) :

(Ta=+25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
C-E Leakage Current	I_{CEO}	$V_{CE}=20V$			50	nA
C-E Saturation Voltage	V_{CES}	$I_C=5mA, I_B=1mA$			250	mV
C-E Voltage	BV_{CEO}	$I_{CE}=500\mu A$	70			V
C-B Voltage	BV_{CBO}	$I_{CB}=50\mu A$	70			V
E-B Voltage	BV_{EBO}	$I_{EB}=50\mu A$	7			V
E-C Voltage	BV_{ECO}	$I_{EC}=50\mu A$	7			V
DC Current Gain	h_{FE}	$V_{CE}=10V, I_C=1mA$	300			-

6. Spectral Response (灵敏度)



7. Packing :

- Packing: Sheet Type

8. Application Notes:

- All data are measured by Orient' s tester on bare chips within 98% of the nominal value.