Photo Transistor --ORT-PT1065

1. Scope：

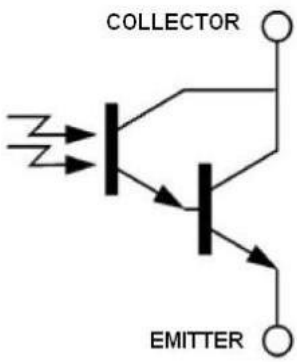
- This specification applies to NPN Darlington connect Photo Transistor.

2. Structure：

- Top Side ：alumnium alloy
- Bottom Side ：gold alloy
- Passivation ：Silicon Nitride

3. Size：

- Die Size ：650μm×650μm±30μm
- Thickness ：280μm±20μm
- Pad Size ：
- Base ：Φ100μm±10μm
- Emitter ：130μm×130μm±10μm
- Active Area ：510μm×510μm±20μm
- Pattern Drawing：fig.1.



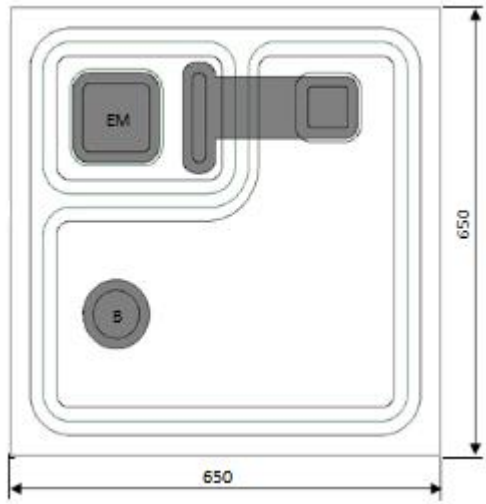


fig.1

4. Absolute Maximum Ratings：

（Ta=+25℃）

Parameter	Symbol	Maximun rating	Unit
Collecctor-Emitter Voltage	V_{CEO}	30	V
Emitter-Collector Voltage	V_{ECO}	4.5	V
Junction Temperature	T_J	150	℃

5. Electro-Optical Characteristics：

(Ta=+25℃)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
C-E Leakage Current	I_{CEO}	V_{CE}=20V			900	nA
C-E Saturation Voltage	V_{CES}	I_C=5mA, I_B=1mA			300	mV
C-E Voltage	BV_{CEO}	I_{CE}=500μA	40			V
C-B Voltage	BV_{CBO}	I_{CB}=50μA	50			V
E-B Voltage	BV_{EBO}	I_{EB}=50μA	5			V
E-C Voltage	BV_{ECO}	I_{EC}=50μA	4.5			V
DC Current Gain	h_{FE}	V_{CE}=10V, I_C=1mA	5000			-

6. Packing ：

- Packing：Sheet Type

7. Application Notes：

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