

**GaAs PIN PD Chip**  
**YL-0910M8C-G**

**1. Scope**

- The specification applies to 10Gbps \*4 arrays optical data communication.
- Type : YL-0910M8C-G

**2. Structure**

- GaAs PIN Chip.
- P Electrode (anode) : Gold.
- N Electrode (cathode) : Gold.

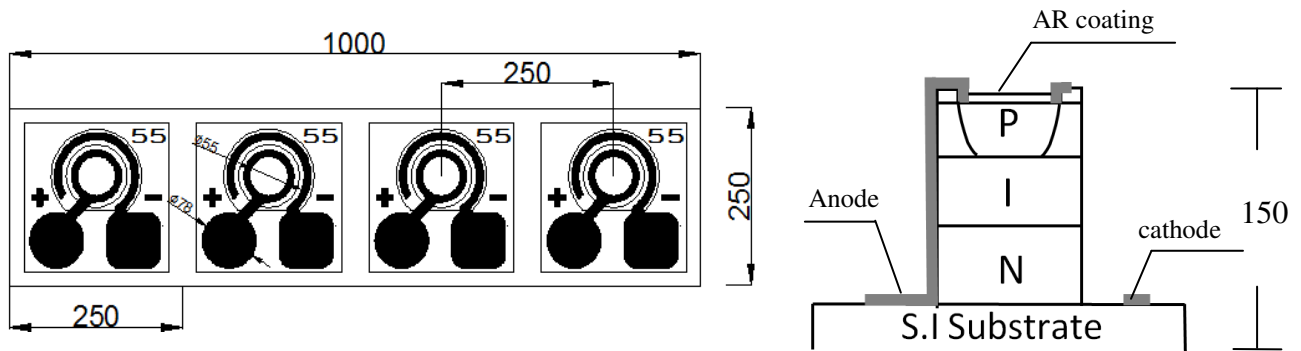
**3. Size**

- Chip size :  $1000 \times 250 \pm 25 \mu\text{m}$
- Thickness :  $150 \pm 25 \mu\text{m}$
- Active area :  $55 \pm 2 \mu\text{m}$  (diameter)
- Pad area :  $80 \pm 2 \mu\text{m}$  (diameter)
- Pattern drawing : per fig. 1

**4. Electro-Optical Characteristics**

Electro-Optical Specifications @  $T_a = 25 \text{ }^\circ\text{C}$

| Parameter             | Symbol   | Test Condition                        | Min. | Typ. | Max. | Unit             |
|-----------------------|----------|---------------------------------------|------|------|------|------------------|
| Responsivity          | R        | $V_r=3\text{V}, \lambda=850\text{nm}$ | 0.50 | 0.60 |      | A/W              |
| Dark Current          | $I_d$    | $V_r=3\text{V}$                       |      | 0.1  | 1    | nA               |
| Capacitance           | C        | $V_r=3\text{V}, f=1\text{MHz}$        |      | 0.2  | 0.25 | pF               |
| Breakdown Voltage     | $V_b$    | $I_r=1\mu\text{A}$                    | 20   |      |      | V                |
| Operating Temperature | $T_{op}$ |                                       | -40  |      | 85   | $^\circ\text{C}$ |
| Storage Temperature   | $T_{st}$ |                                       | -40  |      | 125  | $^\circ\text{C}$ |
| Bandwidth             | BW       | $V_r=3\text{V}$                       |      | 10   |      | GHz              |



Unit :  $\mu\text{m}$

fig. 1

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