

# THREE FIVE MATERIALS

T: 212-213-8290

F: 212-213-6906

## InGaAs / InP PIN PD Chip ---TCP0956

### 1. Scope

- The specification applies to power PD.
- Type : TCP0956.

### 2. Structure

- InGaAs / InP PIN Chip.
- P Electrode (anode) : Gold.
- N Electrode (cathode) : Gold.

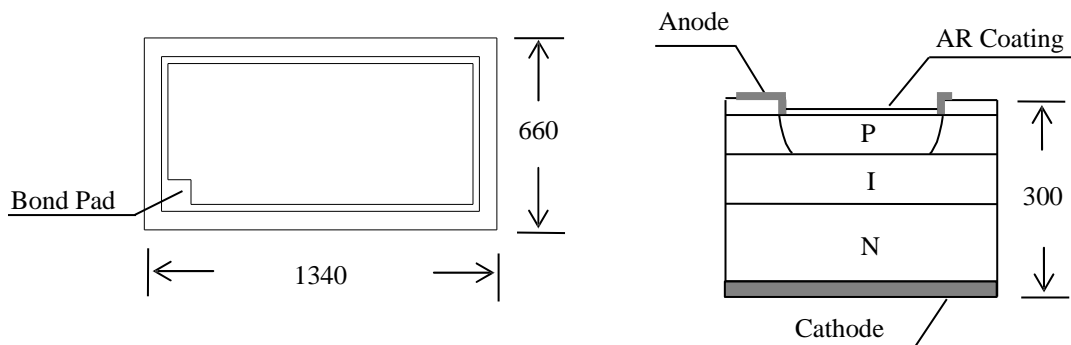
### 3. Size

- Chip size :  $1340 \times 660\mu\text{m}$
- Thickness :  $300 \pm 20\mu\text{m}$
- Active area :  $1194 \times 514\mu\text{m}$
- Bond Pad :  $120 \times 120 \pm 2\mu\text{m}$  (diameter)
- Pattern drawing : per fig. 1

### 4. Electro-Optical Characteristics

Electro-Optical Specifications @ T = 25 °C

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Responsivity	R	$V_r=5V, \lambda=1310\text{nm}$	0.90	0.95		A/W
Responsivity	R	$V_r=5V, \lambda=1550\text{nm}$	0.95	1.00		A/W
Dark Current	$I_d$	$V_r=5V$		0.5	10	nA
Forward Voltage	$V_f$	$I=3\text{mA}$			0.8	V
Breakdown Voltage	$V_b$	$I_r=1\mu\text{A}$	20			V
Shunt Resistance	$R_s$	$V=10\text{mV}$	40			$\text{M}\Omega$
Operating Temperature	$T_{op}$		-40		85	°C
Storage Temperature	$T_{st}$		-40		125	°C



Unit :  $\mu\text{m}$

fig. 1