1. Scope :

This specification applies to high speed phototransistor chips,
Device No. OTC-111.

2. Structure :

2-1. Planar type
2-2. Electrodes :（aluminum alloy）
Refer to the attached drawing

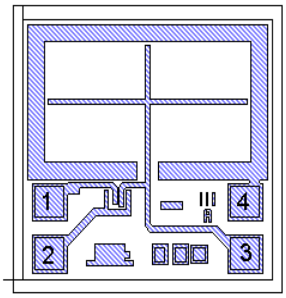
3. SIZE :

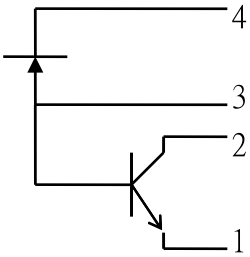
3-1. Chip size : 41.7 mils × 41.7 mils (1.060 mm × 1.060 mm).
3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
3-3. Bonding pad : 4.7 mils × 4.7 mils ± 0.8 mils (0.120 mm × 0.120 mm ± 0.02 mm).
3-4. Photodiode active area: 17.7 mils × 32.3 mils ± 1.2 mils (0.45 mm × 0.82 mm ± 0.03 mm)
3-5. Pattern drawing : refer to the attached drawing.

*Including scribing line .The chip size is about (1.020±0.04)×(1.020± 0.04)mm^{2}. after dicing.

4. Electro-potical characteristics (Ta = 25 ℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic(1) output current	$I_{OH}(1)$	$V_{CE}=V_{BE}=5.5V$			500	nA
Logic(1) output current	$I_{OH}(2)$	$V_{CE}=V_{BE}=15V$			1	μA
Collector-emitter Saturation Voltage	$V_{CE(S)}$	Ic=2.4mA IB=100 μA			0.4	V
Current gain	h_{FE}	$V_{CE}=5V$ $I_C=3mA$	50		150	
Propagation delay Time	t_{PHL}/t_{PLH}	Vcc=5V $R_L=1.9K\Omega$		0.3	0.8	μS





Test Circuit for Propagation Delay Time