1. Scope :

This specification applies to high speed phototransistor chips,
Device No. OTC-211.

Note: This model is for engineering sample only. The appearance or electrical characteristics might be Moldified when it put into mass production.

2. Structure :

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

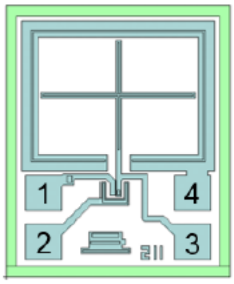
3. SIZE :

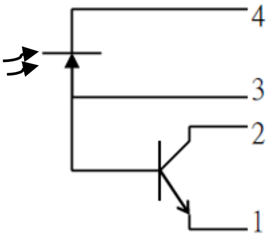
3-1. Chip size : 33.9 mils × 40.9 mils (0.860 mm × 1.040 mm).
3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
3-3. Bonding pad : 4.7 mils × 4.7 mils ± 0.8 mils (0.120 mm × 0.120 mm ± 0.02 mm).
3-4. Photodiode active area: 17.5 mils × 24 mils ± 1.2 mils (0.446 mm × 0.616 mm ± 0.03 mm).
3-5. Pattern drawing : refer to the attached drawing.

*Including scribing line .The chip size is about (0.820±0.04)×(1.000± 0.04)mm^{2} after dicing.

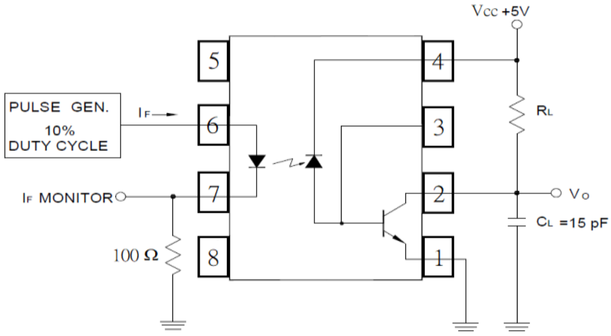
4. Electro-potical characteristics (Ta = 25 ℃)

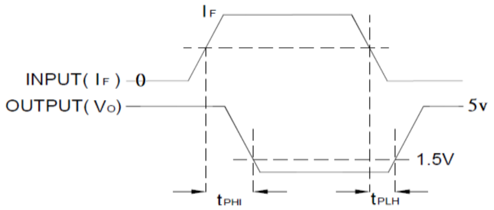
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic(1) output current	I_{OH}(1)	V_{CE}=5.5V V_{4E}=5.5V			500	nA
Logic(2) output current	I_{OH}(2)	V_{CE}=30V V_{4E}=30V			1	µA
Collector-emitter Saturation Voltage	$V_{CE(S)}$	Ic=2.4mA Ib=100µA			0.25	V
Current gain	h_{FE}	V_{CE}=5V I_C=3mA	50		150	
Propagation delay Time	t_{PHL}/t_{PLH}	Vcc=5V R_L=1.9KΩ		0.3	0.8	µS





Test Circuit for Propagation Delay Time





5. TASC 台亞半導體股份有限公司 Taiwan-Asia Semiconductor Corporation

Parameter	Symbol	Rating	Unit
Supply voltage	Vcc	30	V
High level output voltage	Vo	20	V
Low level output current	I_{OL}	8	mA
High level supply current	I_{CCH}	1	μA
Operating temperature	Topr	-55 to +85	℃
Storage temperature	Tstg	-55 to +125	℃