

1. Scope :

This specification applies to high speed photodarlington chips,
Device No. OTC-113.

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 x 41.7 mils (1.06 mm x 1.06 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Bonding pad : 4.7 mils x 4.7 mils ± 0.8 mils (0.120 mm x 0.120 mm ± 0.02 mm).
- 3-4. Photodiode active area: 17.7 mils x 32.3 mils ± 1.2 mils (0.45 mm x 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)x(1.020± 0.04)mm² after dicing.

4. Electro-potical characteristics (Ta = 25 °C) (For pin 1.2.3. Single transistor)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------------------|---------------------|---|------|------|------|------|
| Logic(1) output current | I _{OH} (1) | V _{CE} =V _{BE} =7V | | | 100 | μA |
| Logic(1) output current | I _{OH} (2) | V _{CE} =V _{BE} =18V | | | 100 | μA |
| Collector-emitter Saturation Voltage | V _{CE(S)} | I _C =4.8mA I _B =100 μA | | | 0.4 | V |
| Current gain | h _{FE} | V _{CE} =5V I _C =3mA | 50 | | 150 | |

