

PIN SILICON
PHOTODIODECHIPS

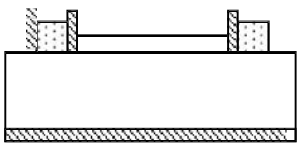
1. Scope:

This specification applies to PIN silicon photodiode chips.



2. Structure:

- Type: PIN diode.
- Electrodes:
Top side (Anode&Cathode):
Aluminum alloy.

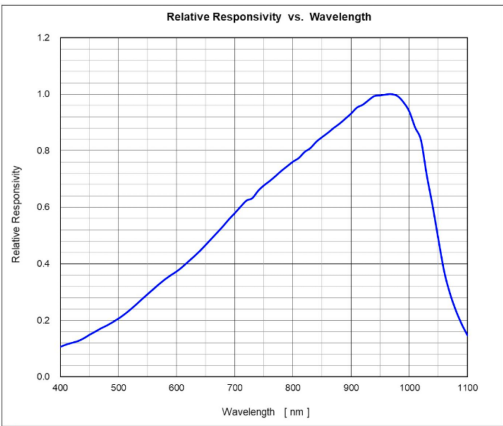


3. Size:

- Chip size (including scribe lane): 448.0 mils × 450.0 mils (11.40 mm × 11.45 mm).
- Chip thickness: 14.6 ± 1.0 mils (0.370 mm ± 0.025 mm).
- Radius of active area: 205 mils ± 0.8 mils (5.2 ± 0.020 mm).
- Bonding pad (Anode): width 3.9 mils (0.10 mm) and outer radius 206.0 mils (5.20 mm).
- Pattern drawing: refer to the attached drawing.

4. Electro-optical characteristics (Ta = 25 °C):

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse dark current	I_D	$V_R=200V$ $E_e=0mW/cm^2$			25	nA
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	60			V
Forward Voltage	V_F	$I_F=20mA$ $E_e=0mW/cm^2$			1.2	V
Total Capacitance	C_T	$V_R=0V$ $E_e=0mW/cm^2$ $f=1MHz$		70		pF



²⁰ bare chip measured with integrating sphere, for reference only.

