

1. Scope :

This specification applies to NIP silicon UV-enhanced photodiode chips,
Device No. PD-20160U-B.

2. Structure :

- 2-1. Planar type : NIP diode.
- 2-2. Electrodes :
 Top side (Cathode) : Aluminum alloy .
 Back side (Anode) : Gold .

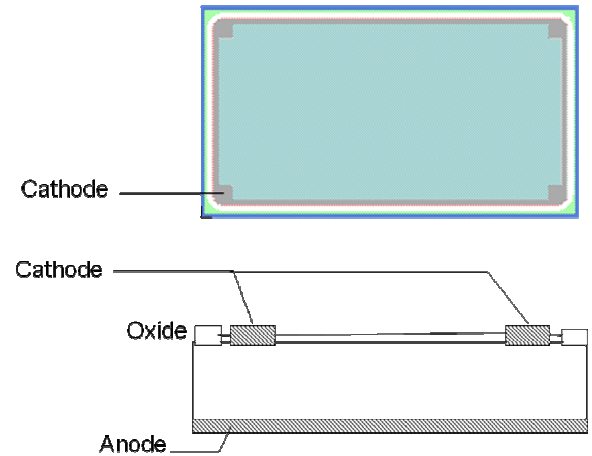
3. Size :

- 3-1. Chip size (including scribe lane) : 216.5 mils x 118.1 mils (5.500 mm x 3.000 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 196.8 mils x 98.4 mils (5.000 mm x 2.500 mm).
- 3-4. Bonding pad (Cathode) : 7.90 mils x 7.90 mils (0.200mm x 0.200mm).
- 3-5. 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	$V_R=10V$ $E_e=0mW/cm^2$			30	nA
**Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	33			V
Sensitivity Wavelength Range	λ	-	190		1100	nm
Peak sensitivity wavelength	λ_p	-		880		nm
Total Capacitance	C_t	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		60		pF

**Based on 100% probing.



5. Relative spectral response: Bare chip measured, for reference only.

