

1. Scope :

This specification applies to InGaAs PIN photodiode chips.
Device No. ED-MPD1313VB

2. Structure :

- 2-1. Type : PIN diode.
2-2. Electrodes :
Top side (Anode) : Au alloy.
Back side (Cathode) : Au alloy.

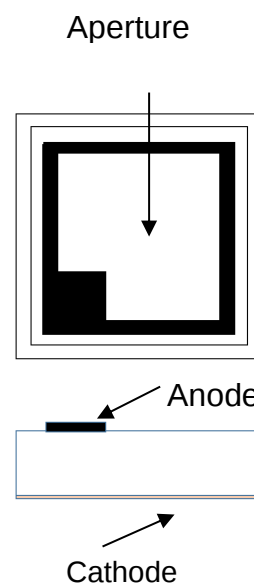
3. Size :

- 3-1. Chip size : 13 mils × 13 mils ± 1 mil (330 × 330 ± 25μm).
3-2. Chip thickness : 5.9 ± 1 mils (150 ± 25 μm).
3-3. Aperture size : 8.7 mils × 8.7 mils ± 0.2mils (220 × 220 ± 5μm).
3-4. Bonding pad (Anode) : 2.7 × 2.7 ± 0.2mils (70 × 70 ± 5μm).
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	$V_R=5V$ $E_e=0mW/cm^2$		-	1	nA
*Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=1\mu A$ $E_e=0mW/cm^2$	30	-		V
*Forward Voltage	V_F	$I_F=3mA$ $E_e=0mW/cm^2$		-	0.7	V
Capacitance	C_p	$V_R=5V$ $f=1MHz$	-	-	5.0	pF
Responsivity	Resp	$V_R=5V$ Wavelength =1310nm	0.8	-		A/W

*Based on 100% probing



5. Typical Electro-Optical Characteristics Curve:

Fig 1. Relative Responsivity vs Wavelength

