

# Photodetectors/OPIC light Detector

## Pickup Photodetectors for CD Players and Video Disc Players

We are manufacturing 6-partition photodiodes for 3 beams (PD663PS, PD666PS) for used as Photodetectors for pickups of CD players and video disc players, A list of approximate specifications is given below

| Model No. | Features   | Characteristics  |   |                                  | Outline dimensions |
|-----------|--|--|---|----------------------------------|--------------------|
|           |  | Sensitivity  | Dark current  | Peak sensitivity wavelength      |                    |
| PD663PS   | <ul style="list-style-type: none"> <li>For 3 beams (6-partition photodiode)</li> <li>High sensitivity</li> <li>Transparent transfer molded package with flat pins</li> </ul> | MIN 0,45A/W<br>$\lambda = 780\text{nm}$<br>(Application: A, B) | MAX 0.2nA<br>$V_R = 15\text{V}$<br>Application: B)  | TYP 840nm<br>(Application: A, B) | Fig. 104-1         |
| PD666PS   | <ul style="list-style-type: none"> <li>For 3 beams (6-partition photodiode)</li> <li>High sensitivity</li> <li>Transparent transfer molded package with flat pins</li> </ul> | MIN 0,45A/W<br>$\lambda = 780\text{nm}$<br>(Application: A, B) | MAX 0,2 nA<br>$V_R = 15\text{V}$<br>Application: B) | TYP 840nm<br>(Application: A, B) | Fig. 105-1         |

A: Light detector for tracking ; B: Light detector for focusing and RF signal

## OPIC\* Light Detetor for Laser Beam Printers

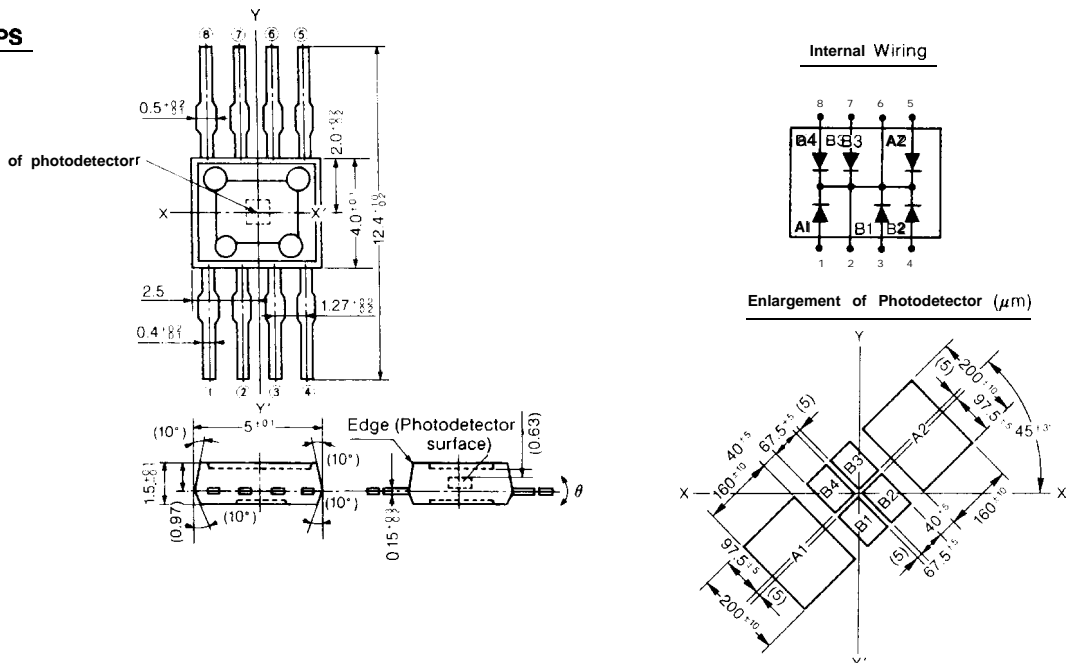
We are also manufacturing high speed response type OPIC light detector for possible positional deviation of the laser spot of laser beam printer

| Modal No. | Features   | Charac ristics   |   | Outline dimensions |
|-----------|--|--|---|--------------------|
|           |  | H to L threshold incident light intensity              | Propagation time  |                    |
| 1S456     | <ul style="list-style-type: none"> <li>High speed response (<math>t_{PHL}</math>: TYP. 230ns.)</li> <li>Light detection pattern to allow for possible positional deviation of the laser spot</li> <li>Compact and mini-flat package</li> </ul> | TYP. $100\mu\text{W}$<br>( $R_o = 5.1\text{k}\Omega$ ) | $t_{PHL}$ : MAX. 400ns<br>$t_{PLH}$ : MAX. 400ns<br>$C_L = 15\text{pF}$<br>$R_O = 5.1\text{k}\Omega$<br>$R_L = 510\Omega$ | Fig. 105-2         |

\*OPIC: OPIC is a trademark of Sharp and stands for Optical IC.

It has a light detecting element and signal processing circuitry integrated onto a single chip.

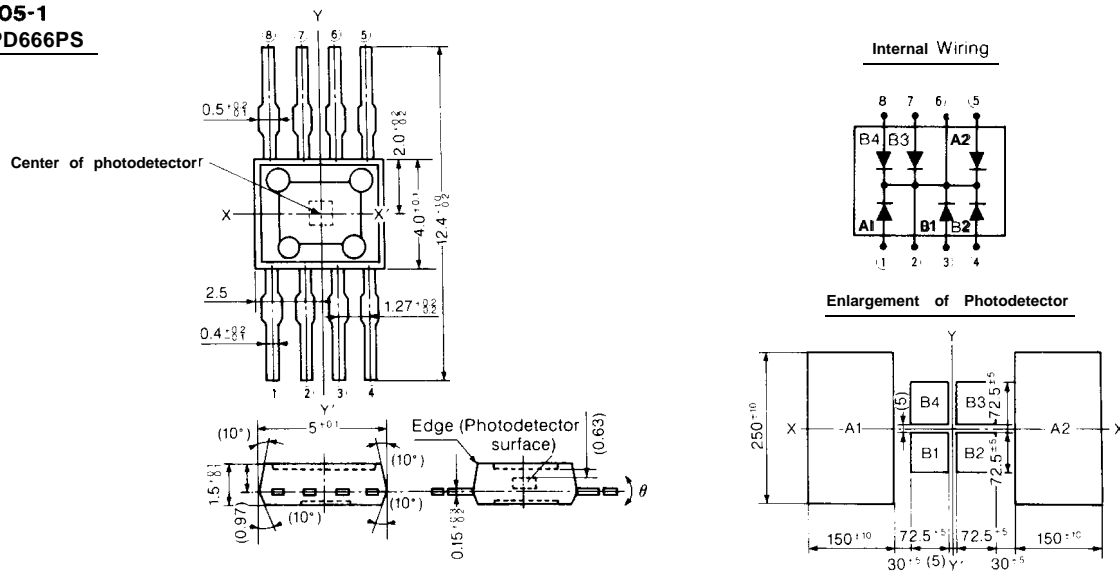
Fig. 104-1  
PD663PS



# Outline Dimensions

Unit: mm

**Fig.105-1**  
**PD666PS**



**Fig.105-2**  
**1S456**

