

MITSUBISHI PHOTO DIODES

## PD7XX26 SERIES

InGaAs PIN PHOTO DIODES

# PD793D26

### DESCRIPTION

PD793D26 Series are InGaAs pin photodiodes which has a sensitive area of  $\phi 20\text{mm}$ . PD7XX26 is suitable for receiving the light having a wavelength band of 1000 to 1600nm. This photodiode features high-speed response and a high quantum efficiency, and is suitable for the light receiving elements for optical fiber communication systems.

### Feature

- $\phi 20\text{mm}$  active diameter
- 1000~1600nm wavelength band
- Small dark current
- High speed response
- High quantum efficiency

### APPLICATION

Receiver for optical communication system

### ABSOLUTE MAXIMUM RATINGS

| Symbol           | Parameter           | Conditions | Ratings    | Unit |
|------------------|---------------------|------------|------------|------|
| V <sub>r</sub>   | Reverse voltage     | -          | 20         | V    |
| I <sub>r</sub>   | Reverse current     | -          | 500        | mA   |
| I <sub>f</sub>   | Forward current     | -          | 2          | mA   |
| T <sub>c</sub>   | Case temperature    | -          | -40 ~ +85  | ° C  |
| T <sub>stg</sub> | Storage temperature | -          | -40 ~ +100 | ° C  |

### ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>c</sub>=25°C)

| Symbol         | Parameter         | Test conditions                                     | Limits |      |      | Unit |
|----------------|-------------------|---|--------|------|------|------|
|                |                   |   | Min.   | Typ. | Max. |      |
| C <sub>t</sub> | Capacitance       | V <sub>r</sub> =5V, f=1MHz                          | -      | 0.16 | 0.30 | pF   |
| I <sub>d</sub> | Dark current      | V <sub>r</sub> =5V                                  | -      | 0.5  | 2.0  | nA   |
| R              | Responsivity      | V <sub>r</sub> =5V, $\lambda$ =1300nm               | 0.75   | 0.85 | -    | A/W  |
| f <sub>c</sub> | Cut-off frequency | V <sub>r</sub> =5V, $\lambda$ =1300nm, RL=50W, -3dB | 8      | 10   | -    | GHz  |

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## OUTLINE DRAWINGS

**PD793D26**



 Alumina submount

