

# APCD-780-06-C2



### **TECHNICAL DATA**

## IR diode laser module

APCD-780-06 is a multi purpose, **lowest cost**, small size infrared diode laser module featuring a acrylic housing with embedded lens, and integrated APC circuitry for long time stable operation

#### Features

- Small size (Ø 6.5 x 9.0 mm)
- Fixfocus
- APC (auto power control) IC integrated
- Low current consumption
- Surge current protection
- Excellent beam quality
- Laser class II

#### Absolute Maximum Ratings (T<sub>c</sub>=25°C)

| ltem                  | Symbol           | Value | Unit |
|-----------------------|------------------|-------|------|
| Power Supply Voltage  | V <sub>cc</sub>  | 3.3   | V    |
| Output Power          | Po               | <1    | mW   |
| Operating Temperature | T <sub>C</sub>   | 0 +40 | °C   |
| Storage Temperature   | T <sub>stq</sub> | 0 +60 | °C   |

#### Specifications (Tc=25°C, Po<1mW, Vcc=3V)

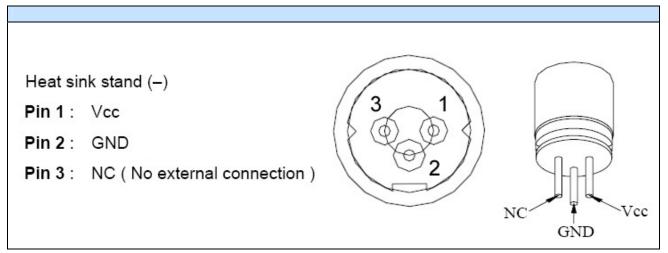
|                                 | Min.      | Тур.   | Max. | Unit |
|---------------------------------|-----------|--------|------|------|
| Optical                         |           |        |      |      |
| Center Wavelength $\lambda_{C}$ | -         | 785    | -    | nm   |
| Output Power                    | -         | -      | 1.0  | mW   |
| Divergence angle                |           | 2.0    |      | mrad |
| Output Aparture                 |           | 1.8    |      | mm   |
| Beam Size at 10M                |           | <20    |      | mm   |
| Electrical                      |           |        |      |      |
| Current draw                    | -         | -      | 35   | mA   |
| Supply voltage                  | 2.5       | -      | 3.3  | V    |
| General                         |           |        |      |      |
| Body                            |           | Acryl  |      |      |
| Dimensions                      | 6.5 x 9.0 |        |      | mm   |
| Lens                            |           | Acryl  |      |      |
| Mean time to failure (MTTF)     |           | >10000 |      | h    |

The above specifications are for reference purpose only and subjected to change without prior notice

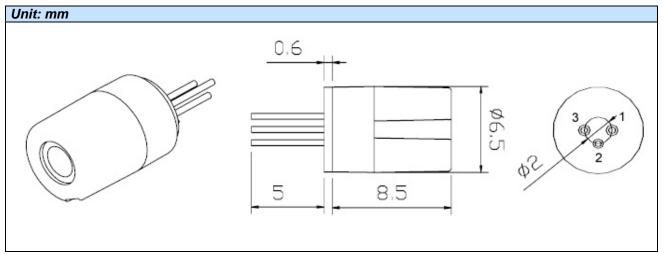




#### **Electrical Connection :**



#### Outline Dimension :



#### Cautions

- 1. Do not operate the device above the macimum rating condition, even momentarily. It may cause unexpected permanent damage to the device.
- 2. Semiconductor laser device is very sensitive to electrostatic discharge. High voltage spike current may change the characteristics of the device, or malfunction at any time during its sercice periode. Therefor, proper measures for precenting electrostatic discharge are strongly recommended.
- 3. Do not look into the laser beam directly with the naked eyes. The laser beam may cause severe damage to human eyes.

