

RayCan 1310 nm Vertical-Cavity Surface-Emitting Laser

RT2xxx2-F

Description

The RayCan 1310 nm VCSEL is designed for high-speed, high-performance communication applications.

Features

- Low dependence of electrical and optical characteristics over temperature
- Data rates from OC-3 to OC-48
- Cylindrical TO package with multi mode fiber pigtail with SC or FC connector

Applications

- Access network for long distance (>2 km)
- Metro area network
- Gigabit Ethernet

Electrical and optical characteristics (T = 20°C)

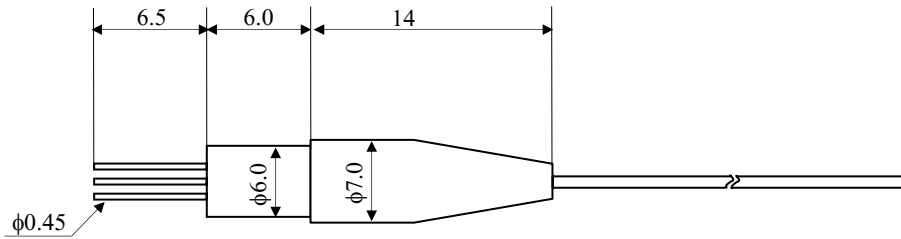
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|-----------------------|----------------|------|----------------|------|----------|-----------|
| Threshold current | I_{th} | 1 | 2.5 | 4 | mA | |
| Forward voltage | V_f | | 3 | | V | |
| Series resistance | R_s | | 100 | 200 | Ω | |
| Output power | P_o | 0.5 | ~ 0.7 | | mW | |
| Wavelength | λ | 1290 | 1310 | 1360 | nm | |
| Rise and fall time | t_r t_f | | ~ 100 ~ 150 | | psec | (20%-80%) |
| Operating temperature | T_{op} | | 0 ~ 70 | | °C | |

Absolute maximum ratings

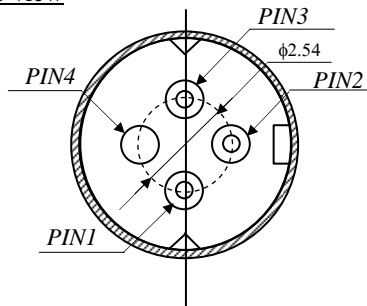
| Parameter | Symbol | Rating | Unit | Notes |
|-----------------------|-----------|---------|------|-------------|
| Forward current | I_f | 10 | mA | |
| Reverse voltage | V_r | 5 | V | |
| Operating temperature | T_{op} | 70 | °C | |
| Storage Temperature | T_{stg} | 0 ~ 100 | °C | |
| Reflow Temperature | T_{ref} | 260 | °C | 10 sec. max |

TO-56 pigtail VCSEL

Dimensions unit : mm

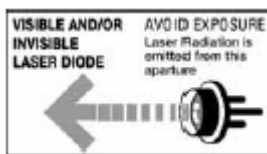


TO package bottom side view



Pinout

| Number | Function |
|--------|---------------|
| 1 | VCSEL Anode |
| 2 | VCSEL Cathode |
| 3 | - |
| 4 | Case |



Warning

Laser beams emitted from this product are hazardous to the naked eye. Avoid eye or skin exposure to direct or scattered radiation.

Caution

This product is sensitive to the electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product.

RayCan

#KT Center 2F, 138 Gajeong-dong, Yusong-gu, Daejeon 305-350

Korea Tel : +82-42-867-1550 Fax : +82-42-867-1551

E-mail : raycan@raycan.com www.raycan.com