

RayCan *1550 nm Vertical-Cavity Surface-Emitting Laser*

RT3xxx1-F

Description

The RayCan 1550 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 single 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		~ 0.3		mW	
Wavelength	λ	1510	1550	1580	nm	
Rise and fall time	t_r t_f		~ 100 ~ 150		psec	(20%-80%)
Side mode suppression	SMSR	30	35		dB	
Operating temperature	T_{op}		0 ~ 70		°C	

Absolute maximum ratings

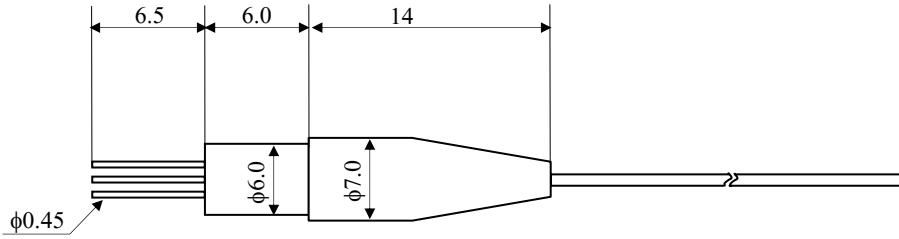
Parameter	Symbol	Rating	Unit	Notes
Forward current	I_f	10	mA	
Reverse voltage	V_r	5	V	
Operating temperature	T_{op}	70	°C	
Storage Temperature	T_{stg}	0 ~ 100	°C	
Reflow Temperature	T_{ref}	260	°C	10 sec. max

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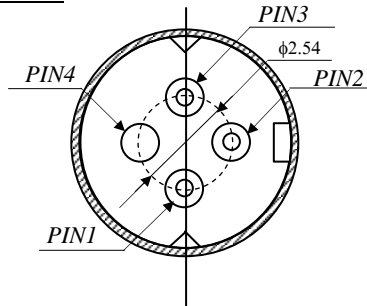
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TO-56 pigtail VCSEL

Dimensions unit : mm

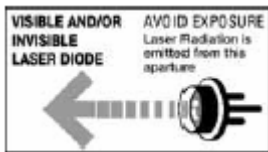


TO package bottom side view



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

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