

RayCan *1310 nm Vertical-Cavity Surface-Emitting Laser*

RT2xxx1-T

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
- Standard TO-46/56 package with/without a flat or ball cap

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	4	mA	
Forward voltage	V_f		3		V	
Series resistance	R_s		100	200	Ω	
Output power	P_o	0.4	~ 0.6		mW	
Wavelength	λ	1290	1310	1360	nm	
Rise and fall time	t_r t_f		~ 100 ~ 150		psec	(20%-80%)
Side mode suppression	SMSR	30	35		dB	
Beam divergence	θ	7	9	11	degree	FWHM

Absolute maximum ratings

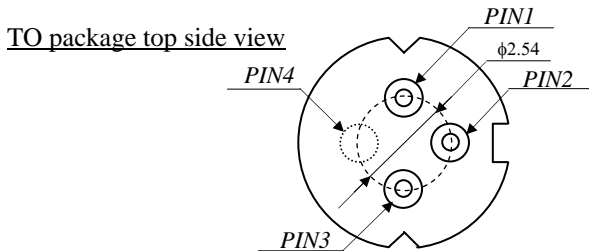
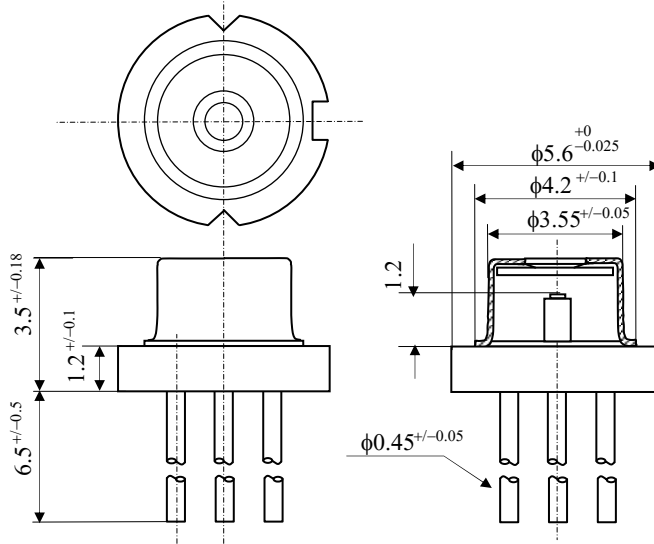
Parameter	Symbol	Rating	Unit	Notes
Forward current	I_f	10	mA	
Reverse voltage	V_r	5	V	
Operating temperature	T_{op}	70	°C	
Storage Temperature	T_{stg}	0 ~ 100	°C	
Reflow Temperature	T_{ref}	260	°C	10 sec. max

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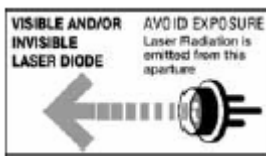
TO-56 flat cap VCSEL

Dimensions unit : mm



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