

850nm Oxide-Confined VCSEL CHIP No : CZVS08500M000A0Z

Features & Applications

- 850 nm center optical wavelength
- Low dependence of electrical and optical characteristics over temperature
- Laser mouse

Electro-Optical Specifications (T = 25 °C)

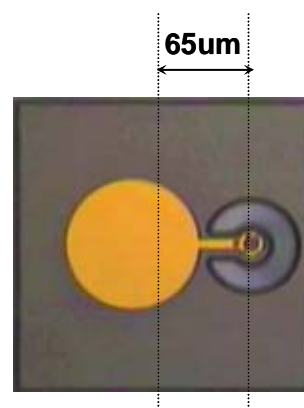
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Threshold Current	I_{th}	1.5	***	4	mA	*****
Operation Voltage	V_{op}	***	1.8	2.1	V	$P_{op} = 0.5mW$
Operation Current	I_{op}	2	***	3	mA	$P_{op} = 0.5mW$ (1)
		3	***	4		$P_{op} = 0.5mW$ (2)
		4	***	5		$P_{op} = 0.5mW$ (3)
Slope Efficiency (S.E.)	η	0.15	0.35	0.5	mW/mA	$P_{op} = 0.5 \sim 1.5mW$
Spectral Line Half Width	$\Delta\lambda$	***	***	0.9	nm	$P_{op} = 0.5mW$
Center Wavelength	λ_c	830	850	860	nm	$P_{op} = 0.5mW$
Beam Divergence	2 θ	***	10	***	deg.	$P_{op} = 0.5mW$

Chip Dimensions:

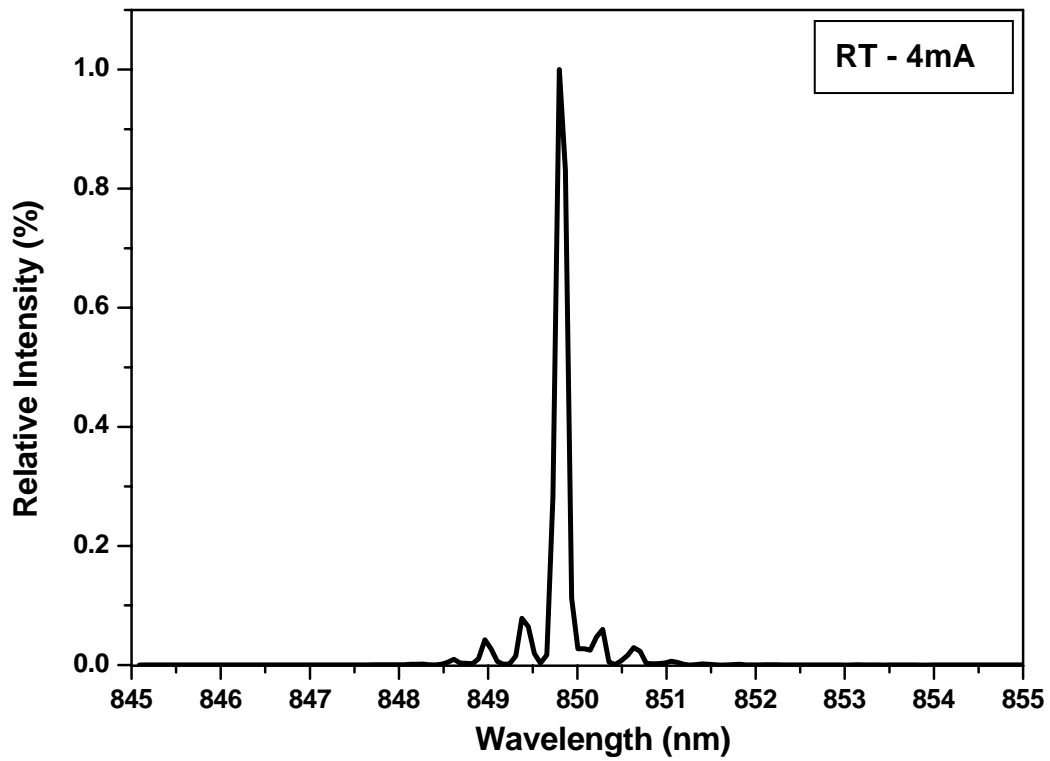
Chip Size : 230 μm (W) x 230 μm (L) x 190 μm (t) \pm 10 μm

Aperture : $\phi = 10 \mu m$

Bonding Pad : $\phi = 100 \mu m$



Emission Spectrum



Angular Displacement

