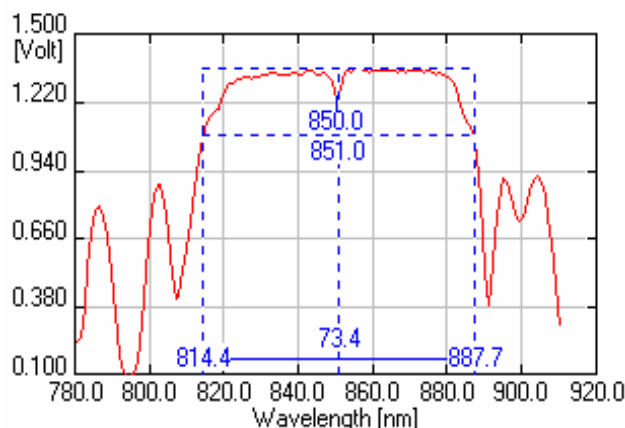


850nm Oxide VCSEL Wafer

No.WAVS0850OC252A2Z

Features & Applications

- Customer Spec. Design
- Gigabit Ethernet
- Laser Array
- High uniformity 2" or 3" wafer
- 850 nm center optical wavelength
- Digital Data Link Communication ; Laser Mouse
- Oxide-confined or proton implant VCSEL
- Low dependence of electrical and optical characteristics over temperature



Wafer Specifications						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
PL Peak Average	λ_p	835	840	845	nm	2 inch
F-P Dip Uniformity	S. D.	***	***	0.5	%	2 inch
F-P Dip Average	λ_{F-P}	***	845	***	nm	2 inch
Substrate Thickness	***	***	350	***	μm	2 inch

Electro-Optical Specifications (Reference)						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	V_f	***	1.8	2.2	V	$I_f=4\text{mA}$
Output Power	P_o	***	0.5	***	mW	$I_f=4\text{mA}$
Threshold Current	I_{th}	***	2	***	mA	*****
Slope Efficiency (S.E.)	η	***	0.35	***	mW/mA	$P_{op} = 0.5 \sim 1.5\text{mW}$
Center Wavelength	λ_c	840	850	860	nm	$I_f=4\text{mA}$

Chip Size : 230 μm (W) x 230 μm (L) x 190 μm (t) ; Aperture: $\phi = 10 \mu\text{m}$