

25G 850nm VCSELs

RC0850-250MA-SC

Legal Disclaimer

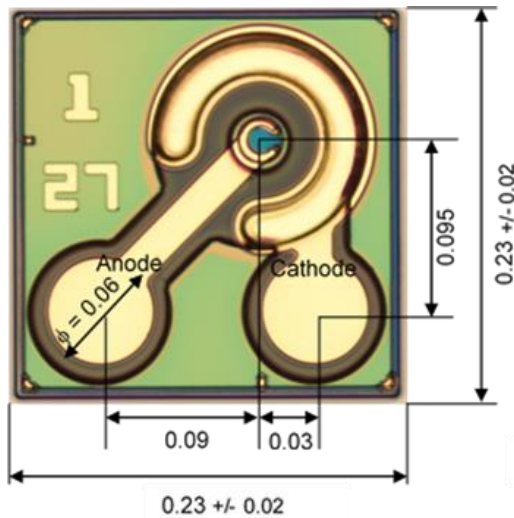
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1. Specifications

RC0850-250MA-SC



0.23 +/- 0.02

Thickness : 0.15 +/- 0.03 mm

Electrical and optical characteristics

(T = 25°C unless otherwise stated)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Threshold current	I_{th}		0.8	1	mA	
Forward voltage	V_f		2.2	2.4	V	I = 7 mA
Series resistance	R_s		80	100	W	I = 7 mA
Output power	P_o	1.5	1.8		mW	I = 7 mA
Wavelength	λ	840	850	860	Nm	I = 7 mA
RMS spectral width	$\Delta\lambda$		0.85		nm	I = 7 mA
Slope efficiency	η_d	0.20	0.25		mW/mA	
Peak temperature dependence	$\Delta\lambda/\Delta T$		0.06		nm/°C	T = 0 to 85°C
Rise and fall time	t_r t_f		~25 ~30		psec	(20%~80%)

Absolute maximum ratings

(T = 25°C unless otherwise stated)

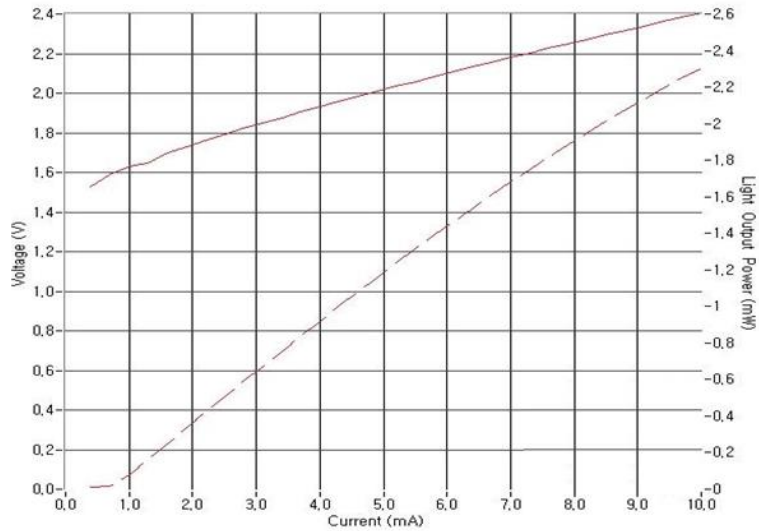
Parameter	Symbol	Rating	Unit	Notes
Forward current	I_f	12	mA	Max. 10 sec
Reverse voltage	V_r	5	V	
Operating temperature	T_{op}	0 ~ 85	°C	
Storage temperature	T_{stg}	-40 ~ 125	°C	
Reflow temperature	T_{ref}	260	°C	Max. 10 sec. 2 mm from case

Notice

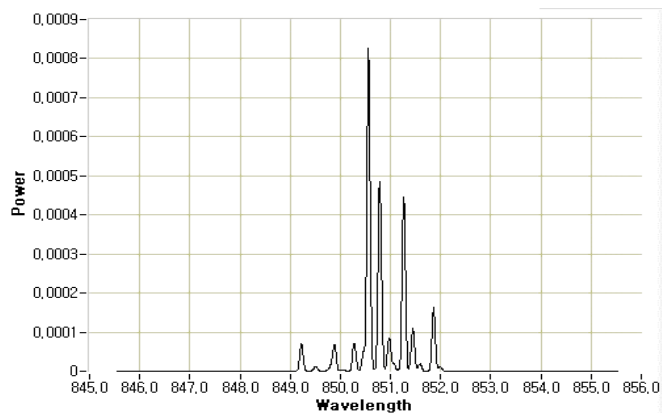
Conditions exceeding those listed may cause permanent damage to the device. Devices subjected to conditions beyond the limits specified for extended periods of time may adversely affect reliability.

2. L-I-V & Spectrum

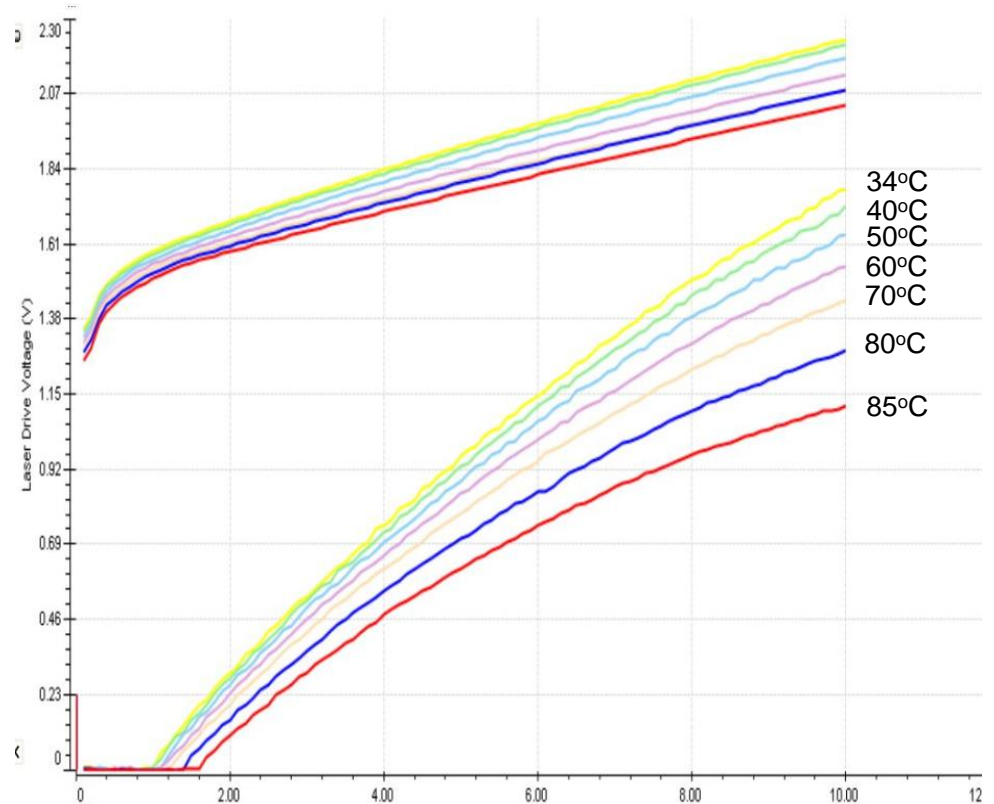
L-I-V at 25°C



Spectrum at 25°C

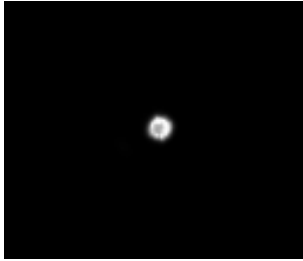


L-I-V-T

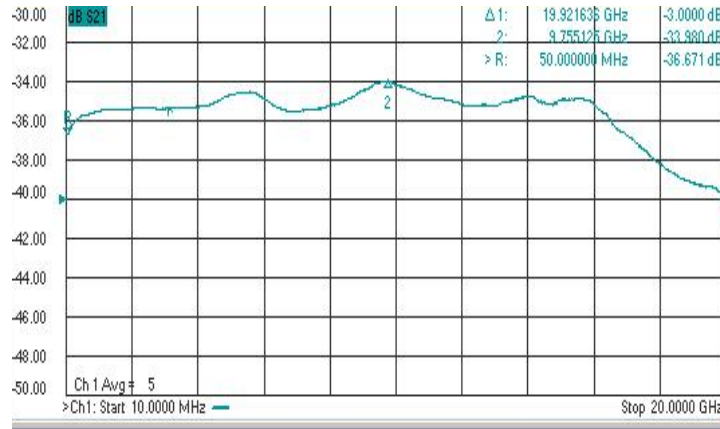


3. Near-field, f_{3dB} , Eye pattern & Endurance test

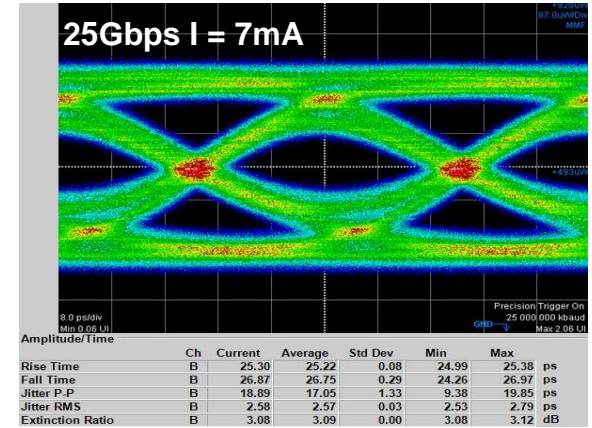
Near-field at 7mA



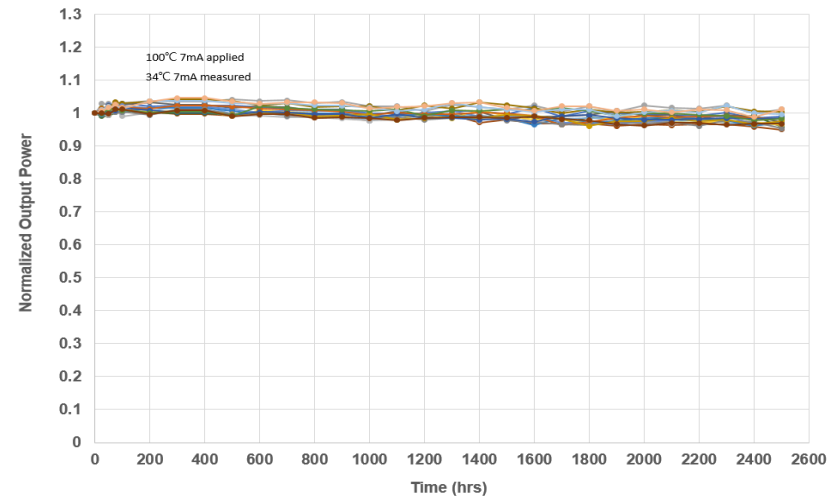
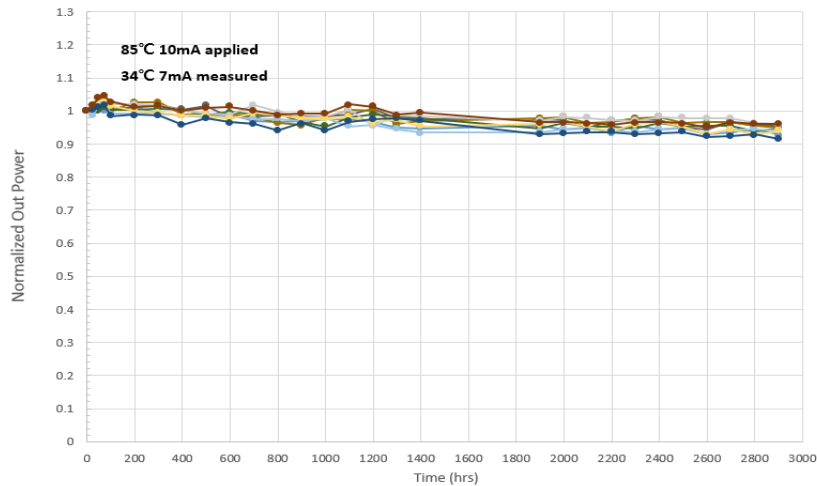
f_{3dB} at 7mA



Eye pattern at 7mA



Endurance test





THANK YOU!

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