



# UOS Red Laser Diode New Products -preliminary spec-

**Specifications in the presentation are preliminary and  
subject to change without any notice**

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Application Engineering Section

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639nm / 200mW CW  
HL63583DG

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# HL63583DG Preliminary Specification (1)

## Features:

- Optical output power: 200mW (CW, 25°C)  
135mW (CW, 50°C)
- Red light emitting: 639 nm
- Single transverse mode
- Small package:  $\phi$ 5.6mm CAN Package
- Internal circuit: Floating circuit
- Application: Show Laser

Schedules: WS: 2019/10 MP: 2019/12



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# HL63583DG Preliminary Specification (2)

## Absolute Maximum Ratings (Tc=25°C)

Items	Symbols	Unit	Value	Test conditions
Optical output power (25°C)	Po	mW	210	CW
Optical output power (50°C)	Po	mW	135	CW
LD reverse voltage	VR(LD)	V	2	
Operating temperature	Topr	°C	-10 to 50	Note1
Storage temperature	Tstg	°C	-40 to 85	

## Optical and Electrical Characteristics (Tc=25°C)

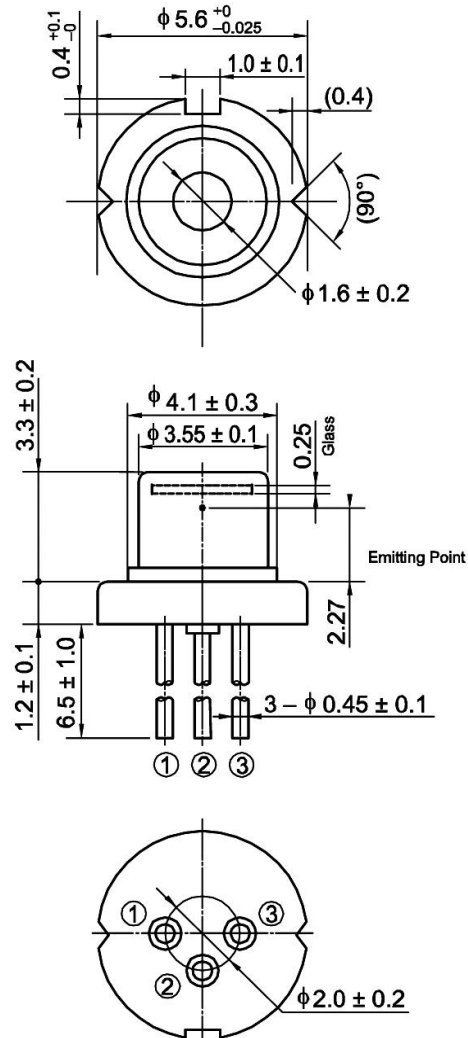
Items	Symbols	Unit	Value			Test conditions
			Min.	Ave.	Max.	
Threshold current	Ith	mA	-	65	80	CW
Operating current	Iop	mA	-	255	290	CW, Po=200mW
Operating voltage	Vop	V	-	2.8	3.3	CW, Po=200mW
Lasing wavelength	$\lambda_p$	nm	633	639	643	CW, Po=200mW
Beam divergence parallel to the junction	$\theta_{//}$	°	5	8.5	13	CW, Po=200mW,FWHM
Beam divergence perpendicular to the junction	$\theta_{\perp}$	°	10	14	18	CW, Po=200mW,FWHM

Note1) Operating temperature “Topr” is defined by Case temperature “Tc”.

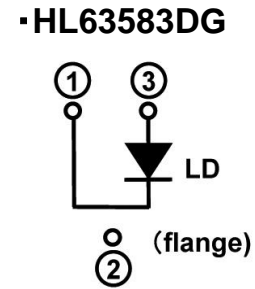
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# HL63583DG Preliminary Specification (3)

## Outline



## Internal circuit



Unit: mm

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