

Approved	Prepared
Y. Tanaka	Y.Tatsuoka

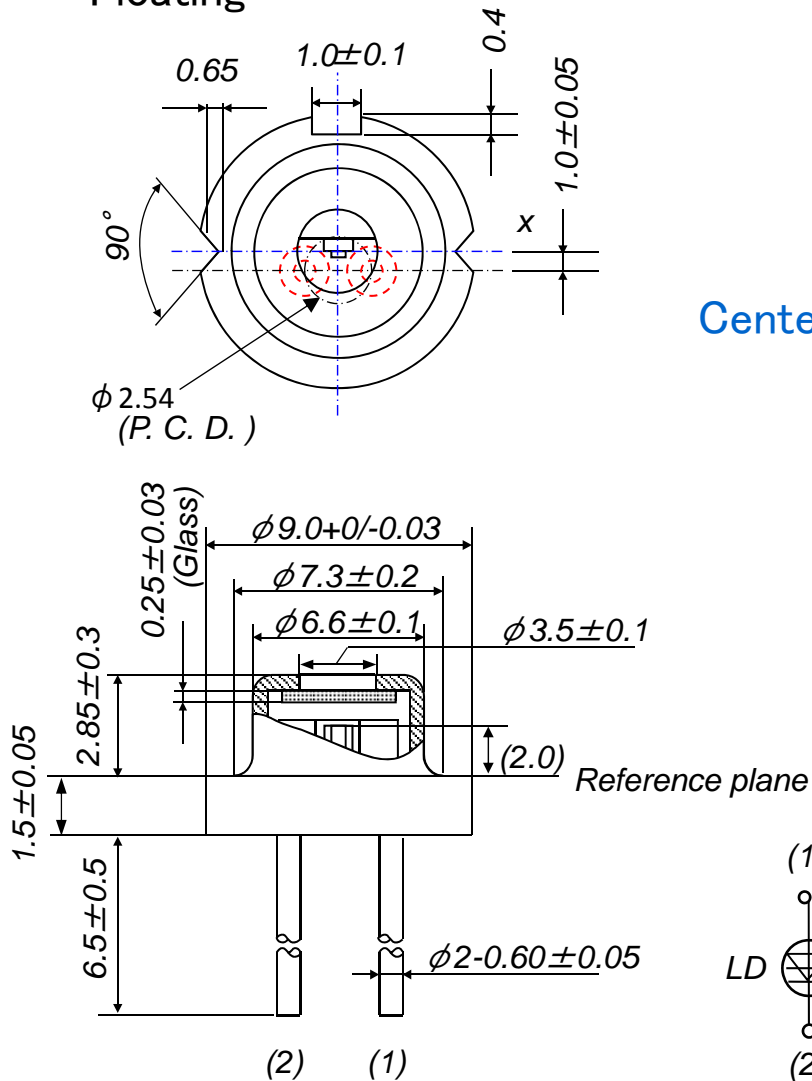
Characterization data of ML562G85

Structure of ML562G85

TLDE-3120

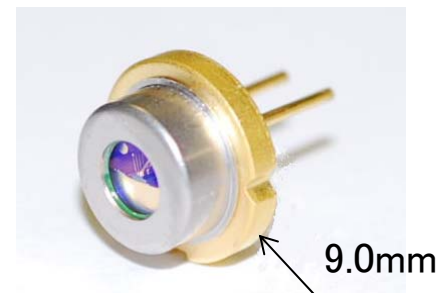
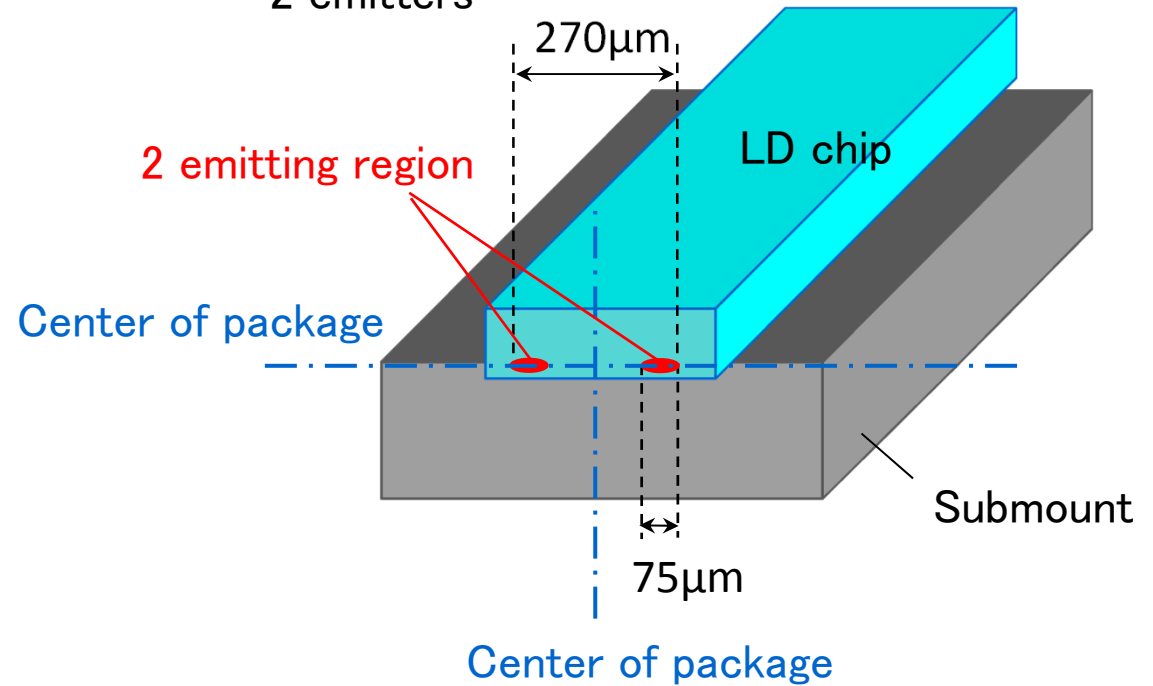
<Package>

- 9.0mm diameter Can Type
- Floating



<LD chip & Submount>

- Multi Transverse Mode
- 2 emitters



1. Type	ML562G85-02						
2. Application	Light Source						
3. Structure	Red Laser Diode						
4. Outline	G880367						
5. Absolute maximum ratings							
No.	PARAMETER	SYMBOL	CONDITION	RATINGS	UNIT		
(1)	Operation Current	I _{op}	CW	Fig.1			
(2)	Reverse Voltage	V _{RL}	-	2	V		
(3)	Anode-Case Voltage (*1)	V _{ac}	-	-200~200	V		
(4)	Operating Case Temperature	T _c	-	0~+55	°C		
(5)	Storage Temperature	T _{stg}	-	-40~+85	°C		
(6)	Soldering Temperature	T _{sol}	Lead Length≥ 2mm	320°C, 2sec			
6. Characteristics table							
No.	PARAMETER	SYMBOL	CONDITION (T _c =25°C(*2) unless otherwise specified)	LIMITS			UNIT
				MIN.	TYP.	MAX.	
(1)	Output Power	P _{op}	CW, I _{op} =2.25A		2.1	-	W
			CW, I _{op} =2.95A, T _c =45°C		2.1	-	W
			CW, I _{op} =2.50A, T _c =55°C		1.3	-	W
(2)	Threshold Current	I _{th}	CW		550		mA
(3)	Operating Voltage	V _{op}	CW, I _{op} =2.25A		2.25		V
(4)	Slope Efficiency	η	CW		1.2		W/A
(5)	Peak Wavelength	λ _p	CW, I _{op} =2.25A	635	639	644	nm
(6)	Beam Divergence (Full Width at 1/e ²)	θ //	CW, I _{op} =2.25A		9		°
		θ ⊥	CW, I _{op} =2.25A		65		°

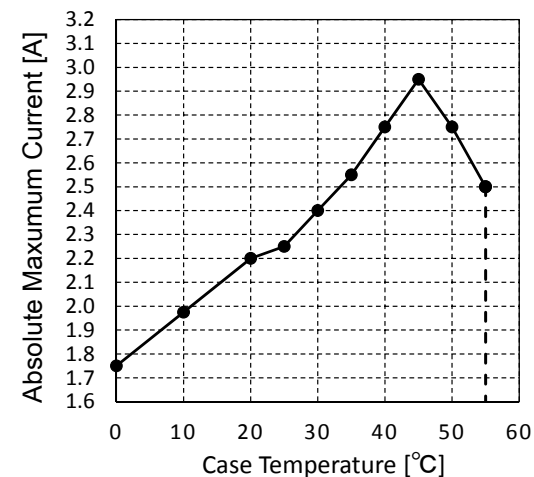


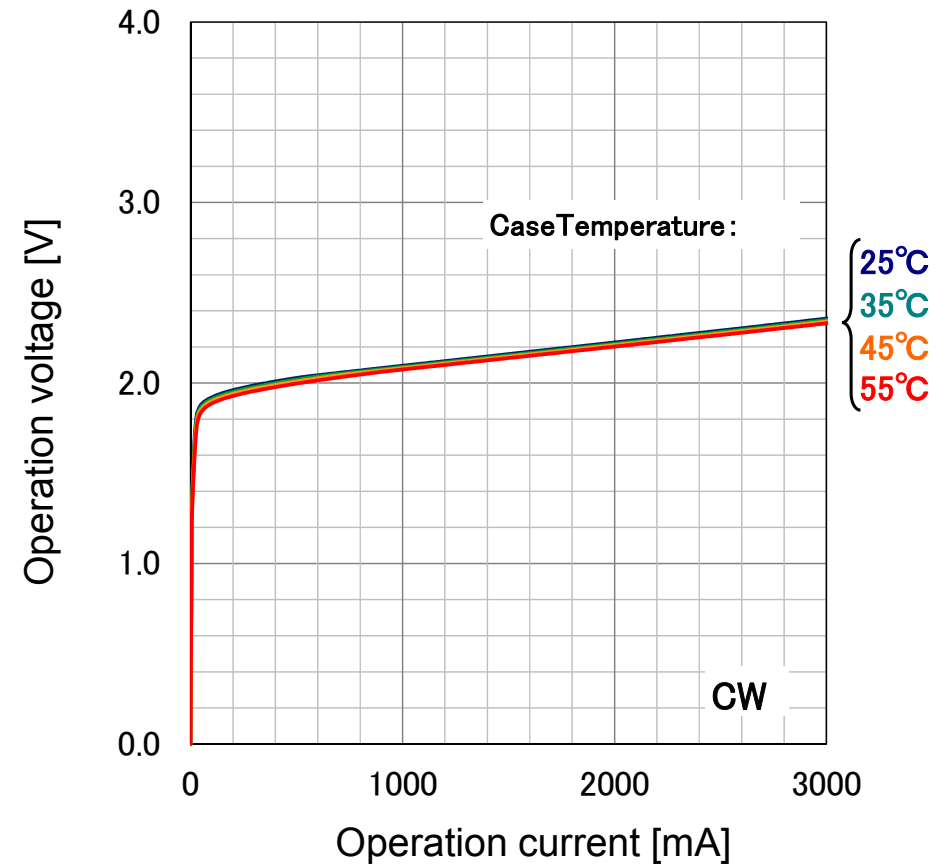
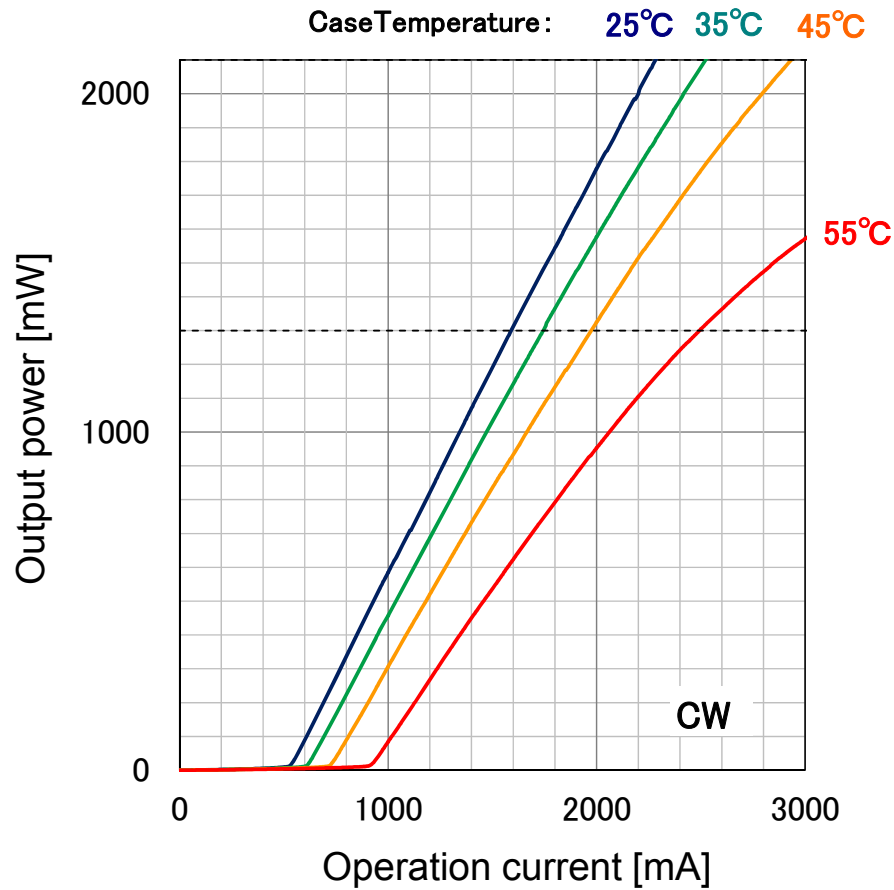
Fig.1

<Note> The maximum rating means the limitation over which the laser should not be operated even instant time, and this does not mean the guarantee of its lifetime. As for the lifetime, refer to the reliability report from Mitsubishi Semiconductor Quality Assurance Section.

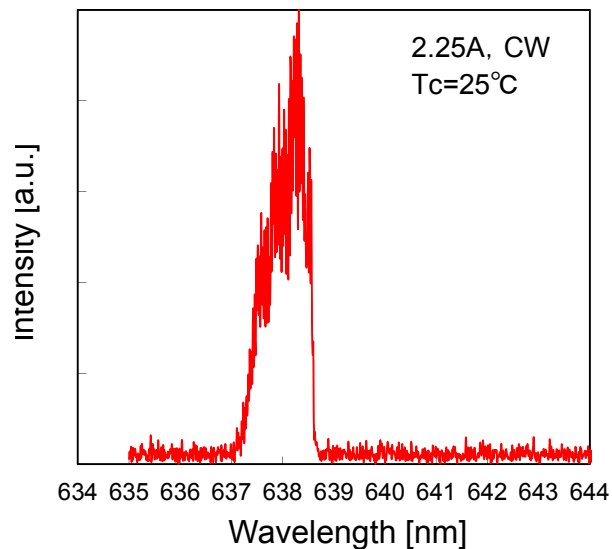
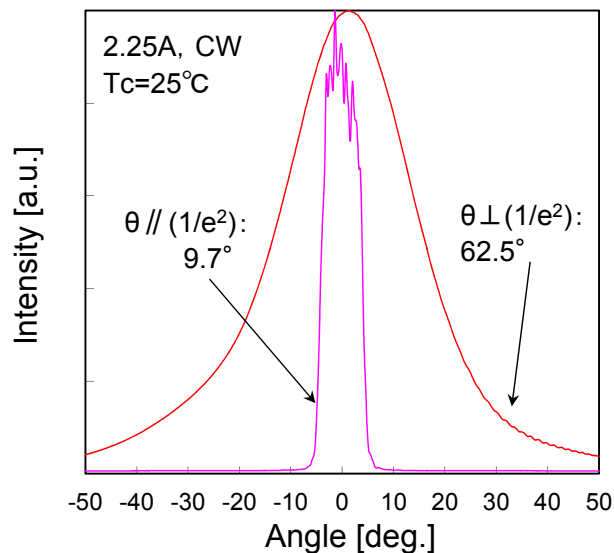
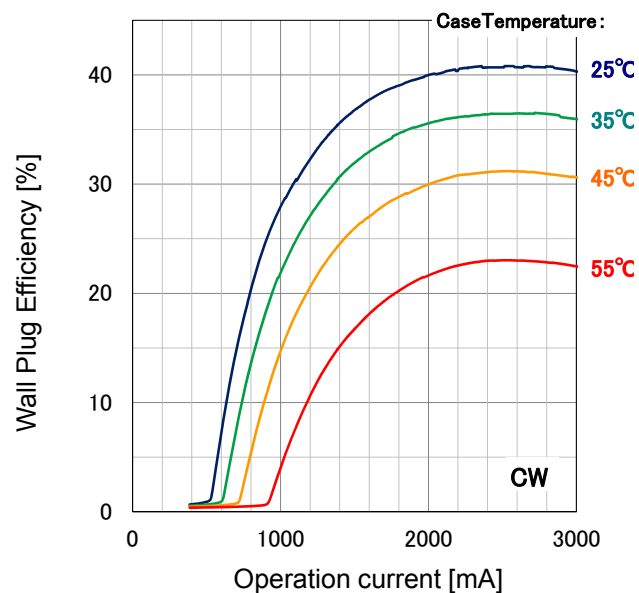
*1: Voltage between Φ9 package and anode lead pin

*2: Actual measurement temperature is adjusted in order to match an active layer temperature to that of stable condition at T_c=25°C.

These specifications are based on MITSUBISHI's method.



Reference Data

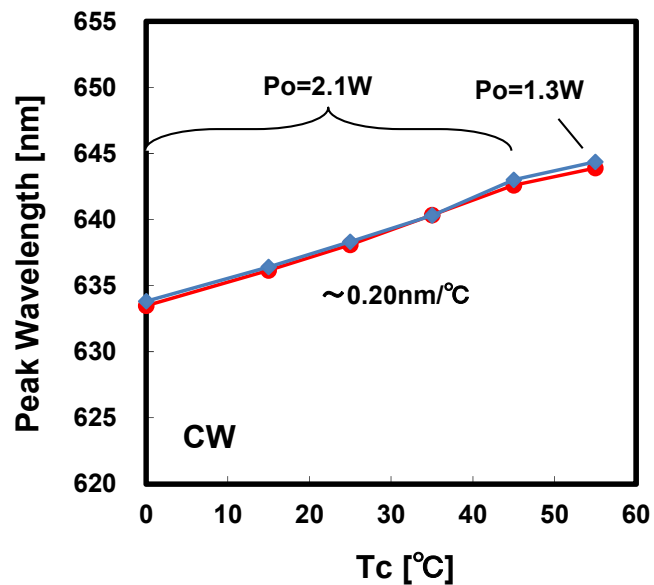
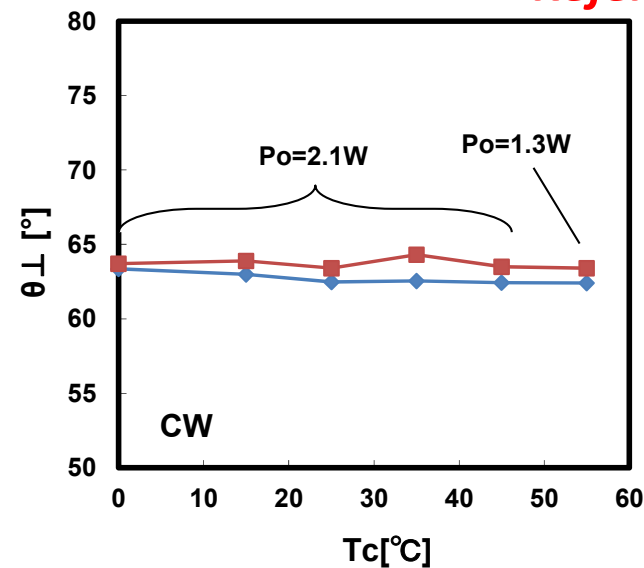
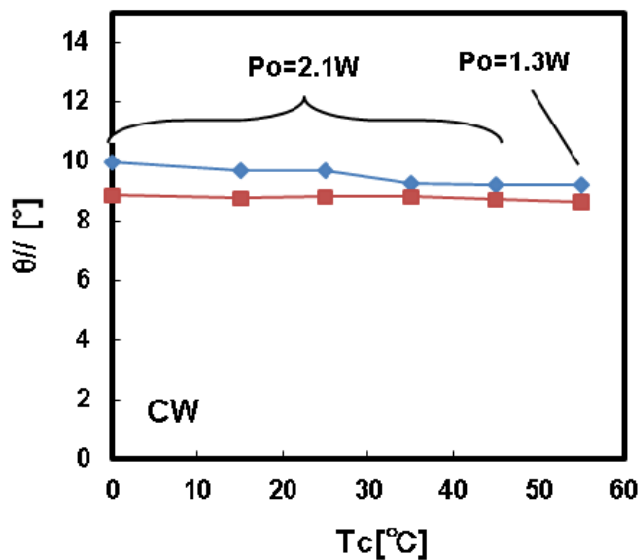


- Wall Plug Efficiency (25°C, 2.1W, CW): **~40%**
- Beam divergence angle 1/e² (25°C, 2.1W, CW):
~10° (// slow axis), **~64°** (⊥ fast axis)
- Wavelength (25°C, 2.5W, Pulse): **638 nm**

Temperature Dependence of ML562G85

TLDE-3120

Reference Data



Reference Data

