

## STU-HL40053MG

404nm /500mW Violet Laser Diode

### Features

- Optical output power: 400mW (CW)
- Violet Lasing: 398~410nm
- Low operating current: 370mA Typ.
- Low operating voltage: 4.9V Max.
- Package: 5.6mm
- Multiple transverse mode
- TE mode oscillation



### Applications

- Bio & Medical
- Measurement

### Absolute Maximum Ratings(Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	500	mW
LD Reverse Voltage	VR(LD)	5	V
Operating Temperature	Topr	0 ~ +30	°C
Storage Temperature	Tstg	-35 ~ +85	°C

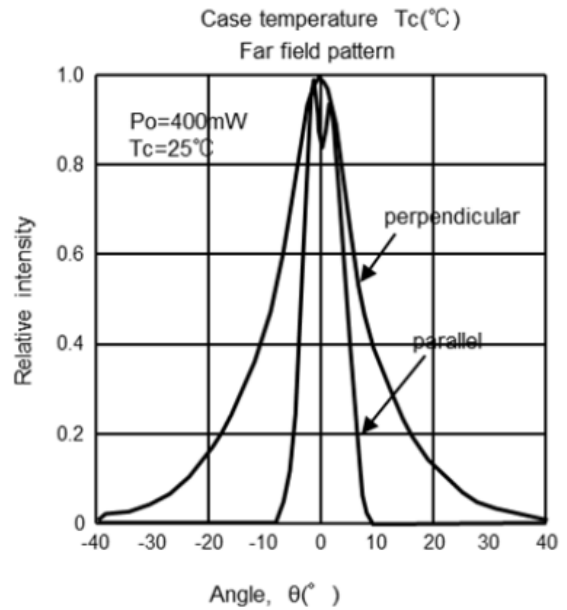
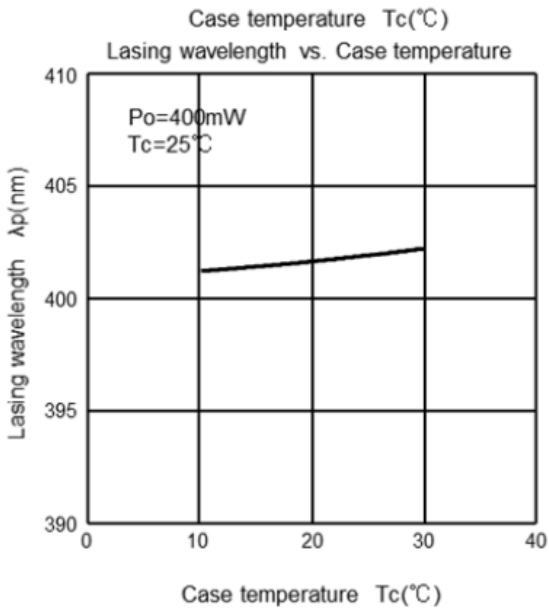
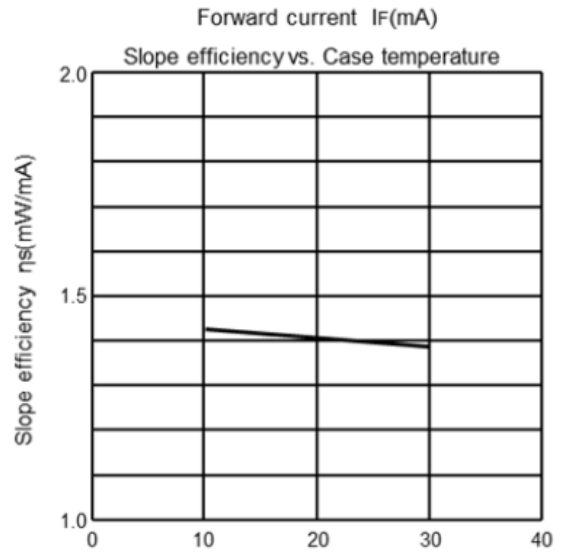
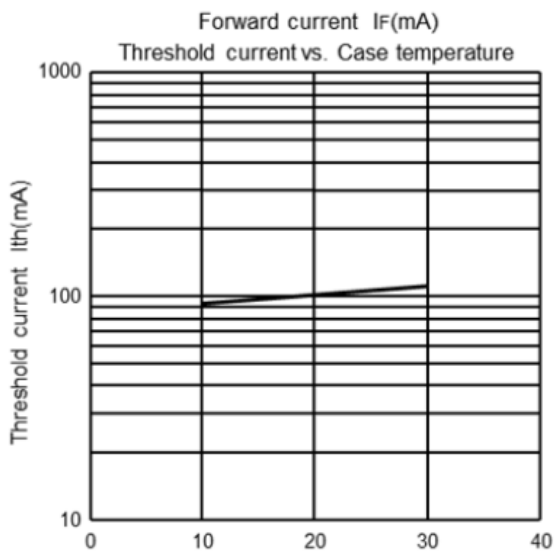
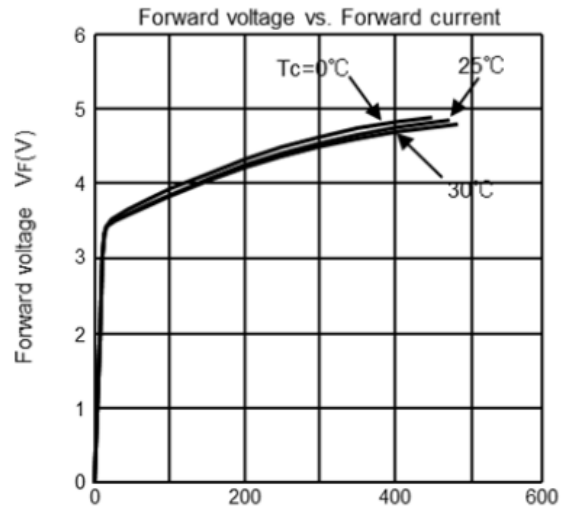
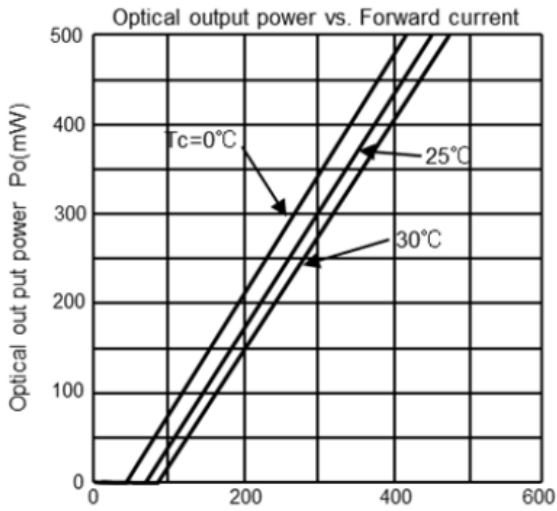
\* Monitor PD for initial checking purpose only

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	110	130	mA	-
Operating current	Iop	-	370	410	mA	Po=400mW
Operating voltage	Vop	-	-	4.9	V	Po=400mW
Beam divergence Parallel to the junction	$\theta_{//}$	5	13	25	°	Po=400mW, Full angle 1/e <sup>2</sup>
Beam divergence Perpendicular to the junction	$\theta_{\perp}$	30	42	50	°	Po=400mW, Full angle 1/e <sup>2</sup>
Lasing Wavelength	$\lambda_p$	398	404	410	nm	Po=400mW

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### Typical Characteristic Curves



Outline & Internal Circuit

