

# BLUE-VIOLET LASER DIODE

## DL-4146-101S

### Tentative

# SANYO

Ver.2 Oct. 2007

#### Features

- Short wavelength : 405 nm (Typ.)
- Low threshold current :  $I_{th} = 26$  mA (Typ.)
- Package :  $\phi 5.6$  mm with PD

#### Applications

Industrial Use

#### Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po (CW)	20	mW
Reverse Voltage	Laser	VR	2	V
Operating Temperature	<sup>1)</sup>	Topr	0 to +75	°C
Storage Temperature		Tstg	-40 to +85	°C

1) Case temperature.

#### Electrical and Optical Characteristics

2) 3) 4) 6)

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		$I_{th}$	CW	-	26	50	mA
Operating Current		$I_{op}$	Po=10mW	-	35	60	mA
Operating Voltage		$V_{op}$	Po=10mW	-	4.8	5.6	V
Lasing Wavelength		$L_p$	Po=10mW	395	405	415	nm
Beam <sup>5)</sup> Divergence	Perpendicular	Qv	Po=10mW	16	19	23	°
	Parallel	Qh	Po=10mW	6	8.5	12	°
Off Axis Angle	Perpendicular	dQv	Po=10mW	-2	-	2	°
	Parallel	dQh	Po=10mW	-2	-	2	°
Differential Efficiency		SE	Po=10mW	0.7	1.1	-	mW/mA
Monitoring Output Current		$I_m$	Po=10mW	0.1	0.2	0.5	mA

2) Initial values 3) All the above values are evaluated with Tottori Sanyo's measuring apparatus

4) Reference values 5) Full angle at half maximum 6) Measurement condition : CW

Note : The above product specification are subject to change without notice.

