

# BLUE-VIOLET LASER DIODE

## DL-5146-351

Tentative

# SANYO

Ver.1 Aug. 2004

### Features

- Short wavelength : 405 nm (Typ.)
- Light Output: 35mW CW
- Low threshold current :  $I_{th} = 50$  mA (Typ.)
- Package :  $\phi 5.6$  mm

### Applications

Industrial Use  
Laser module

### Absolute Maximum Ratings

( $T_c=25^\circ\text{C}$ )

Parameter		Symbol	Ratings	Unit
Light Output	CW	$P_o$ (CW)	35	mW
Reverse Voltage	Laser	VR	2	V
Operating Temperature		$T_{opr}$	-10 to +60	$^\circ\text{C}$
Storage Temperature		$T_{stg}$	-40 to +85	$^\circ\text{C}$

### Electrical and Optical Characteristics

1) 2)

( $T_c=25^\circ\text{C}$ )

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		$I_{th}$	CW	-	50	70	mA
Operating Current		$I_{op}$	$P_o=35\text{mW}$	-	85	110	mA
Threshold Voltage		$V_{th}$	CW	-	5.0	6.0	V
Operating Voltage		$V_{op}$	$P_o=35\text{mW}$	-	5.5	6.5	V
Lasing Wavelength		$L_p$	$P_o=35\text{mW}$	395	405	415	nm
Beam <sup>3)</sup> Divergence	Perpendicular	Qv	$P_o=35\text{mW}$	16	22	28	$^\circ$
	Parallel	Qh	$P_o=35\text{mW}$	6	9	13	$^\circ$
Off Axis Angle	Perpendicular	dQv	-	-3	-	3	$^\circ$
	Parallel	dQh	-	-2	-	2	$^\circ$
Differential Efficiency		$dP_o/dI_{op}$	-	0.6	1.0	-	mW/mA

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

3) Full angle at half maximum

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

