

BLUE-VIOLET LASER DIODE

DL-5146-351

SANYO

Ver.1 Feb. 2005

Features

- Short wavelength : 405 nm (Typ.)
- Light Output: 35mW CW
- Low threshold current : $I_{th} = 40$ 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}	0 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	-	40	60	mA
Operating Current		I_{op}	$P_o=35\text{mW}$	-	70	100	mA
Threshold Voltage		V_{th}	CW	-	4.8	6.0	V
Operating Voltage		V_{op}	$P_o=35\text{mW}$	-	5.5 ⁴⁾	6.5	V
Lasing Wavelength		L_p	$P_o=35\text{mW}$	395	405	415	nm
Beam ³⁾ Divergence	Perpendicular	Qv	$P_o=35\text{mW}$	16	20	24	$^\circ$
	Parallel	Qh	$P_o=35\text{mW}$	6	9	14	$^\circ$
Off Axis Angle	Perpendicular	dQv	-	-3	-	3	$^\circ$
	Parallel	dQh	-	-2	-	2	$^\circ$
Differential Efficiency		SE	-	0.6	1.2	-	mW/mA

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

3) Full angle at half maximum 4) Operating Voltage of this laser is higher than conventional laser(5.5V)

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

