

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 ³⁾ Divergence	Perpendicular	Q_v	$P_o = 35\text{mW}$	16	22	28	$^\circ$
	Parallel	Q_h	$P_o = 35\text{mW}$	6	9	13	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	-	-3	-	3	$^\circ$
	Parallel	dQ_h	-	-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.

