

BLUE-VIOLET LASER DIODE

DL-6146-301

Tentative

SANYO

Ver. 4 Dec. 2004

Features

- Short wavelength : 405 nm (Typ.)
- Light Output: 50mW CW at 100mW (pulse)
- Low threshold current : $I_{th} = 35$ mA (Typ.)
- Package : $\phi 5.6$ mm

Applications

Next generation DVD
Laser module

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o (CW)	50	mW
	Pulse ¹⁾	P _o (pulse)	100	
Reverse Voltage	Laser	VR	2	V
Operating Temperature		T _{opr}	-10 to +70	°C
Storage Temperature		T _{stg}	-40 to +85	°C

1) Pulse Width < 0.1μs, Duty 50%

Electrical and Optical Characteristics

1) 2)

(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	35	70	mA
Operating Current		I _{op}	P _o =50mW	-	90	125	mA
Threshold Voltage		V _{th}	CW	-	4.8	6.0	V
Operating Voltage		V _{op}	P _o =50mW	-	5.6	7.0	V
Lasing Wavelength		L _p	P _o =50mW	395	405	415	nm
Beam ³⁾ Divergence	Perpendicular	Q _v	P _o =50mW	16	20	28	°
	Parallel	Q _h	P _o =50mW	6	9	14	°
Off Axis Angle	Perpendicular	dQ _v	P _o =50mW	-3	-	3	°
	Parallel	dQ _h	P _o =50mW	-2	-	2	°
Differential Efficiency		SE	P _o =50mW	0.6	1	-	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.

