



ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76 1040 VIENNA AUSTRIA
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM



BLUE-VIOLET LASER DIODE

DL-5146-101S Tentative

SANYO

Ver.1 Oct. 2007

Features

- Short wavelength : 405 nm (Typ.)
- Package : ø5.6 mm with PD

Applications

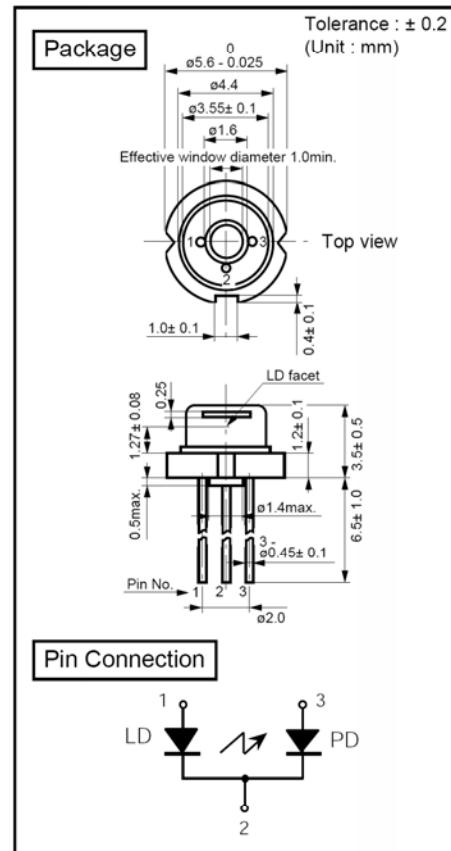
Industrial Use

Absolute Maximum Ratings

(Tc=25°C)

Parameter	Symbol	Ratings	Unit
Light Output	CW	Po (CW)	45 mW
Reverse Voltage	Laser	VR	2 V
Operating Temperature ¹⁾	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	Ith	CW	-	35	55	mA
Operating Current	Iop	Po=40mW	-	70	100	mA
Operating Voltage	Vop	Po=40mW	-	5.2	5.7	V
Lasing Wavelength	Lp	Po=40mW	395	405	415	nm
Beam Divergence ⁵⁾	Perpendicular	Qv	Po=40mW	16	19	°
	Parallel	Qh	Po=40mW	6	8	°
Off Axis Angle	Perpendicular	dQv	Po=40mW	-2	-	°
	Parallel	dQh	Po=40mW	-2	-	°
Differential Efficiency	SE	Po=40mW	0.8	1.2	-	mW/mA
Monitoring Output Current	Im	Po=40mW	0.1	0.3	1.0	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.