

High Performance Laser Diode Series

Blue 445nm CoS Package

KLCB0200Y2WW

■ Overview

Nuvoton Technology Corporation Japan provides a series of blue laser diode. The laser diode which emits 445nm laser light, is assembled as Chip on Submount, CoS package. Unique compound semiconductor process technology and low optical loss structure can realize high output power and high reliability lasers which are suitable for industrial use.

■ Features

- Wavelength: 445 nm (typ.)
- High Output Power, Multiple Transverse Mode
- Emitter Size: 45um x 1um
- Operating Temperature (0 to +60 degrees C)
- Chip on Submount (CoS) Package

■ Applications

- Material Processing
- Bio Medical
- Display
- Other Industrial Use

■ Absolute Maximum Ratings

Item	Symbol	Value	Unit	Condition
Operating current	Iop	3.5	A	CW
Reverse voltage	Vr	5.0	V	-
Operating temperature (Case)	Tc	0 to +60	°C	-
Storage temperature	Tstg	-40 to +85	°C	-

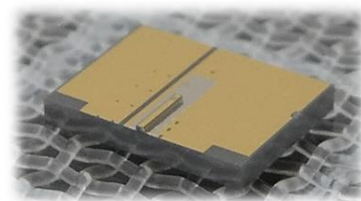
■ Electrical and Optical Characteristics

Tc=25°C, pulse

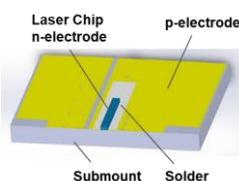
Item		Symbol	Min.	Typ.	Max.	Unit	Condition
Threshold current		Ith	-	0.35	0.50	A	pulse
Optical output power		Po	4.5	5.0	-	W	Iop=3.2A
Operating voltage		Vop	-	4.6	5.5	V	Iop=3.2A
Slope efficiency		Se	1.5	1.8	2.0	W/A	Iop=0.5A ~ 3.2A
Peak wavelength		λ	438	445	452	nm	Iop=3.2A
Beam divergence	Parallel ¹⁾	θ_h	6	9	14	deg.	Iop=3.2A
	Perpendicular ¹⁾	θ_v	40	45	50	deg.	Iop=3.2A

Note) 1) Full width at 1/e² of the peak intensity.

Package



Outline image



Length x Width x Height
4.0 x 3.0 x 0.58 mm

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