

Violet Laser diodes from USHIO

EPIC Online Technology Meeting on Blue and
UV Laser Diodes

Ardan Fuessmann

Sales Director SSL

20th of April 2020

Copyright(C) 2020 Ushio Group. All Rights reserved.

The logo for Ushio, featuring the word "USHIO" in a bold, green, sans-serif font.

Applying Light to Life



Solid State Lighting Products – Line Ups



In-house one stop solution from R&D → Epitaxy → Package

Wavelength: **UV 400nm** ~ **IR 850nm** Power : High 3500mW class ~ Low 5mW class



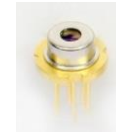
Multi beam LD



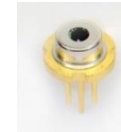
(F16mm)



(F9mm)



(F5.6mm)



(F5.6mm)

Standard LD (single beam)



(F9mm)



(F5.6mm)



(F5.6mm)



(F3.8mm)

Wavelength : **UV 365nm** ~ **IR 1,750nm** Power : High 1,400mW class ~ Low 1mW class



High Power TOP LED



Surface Mount LED



Multi-Chips



FL Type



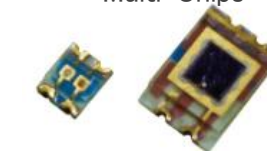
SG Type



Metal-Stem Type LED



Photo sensor

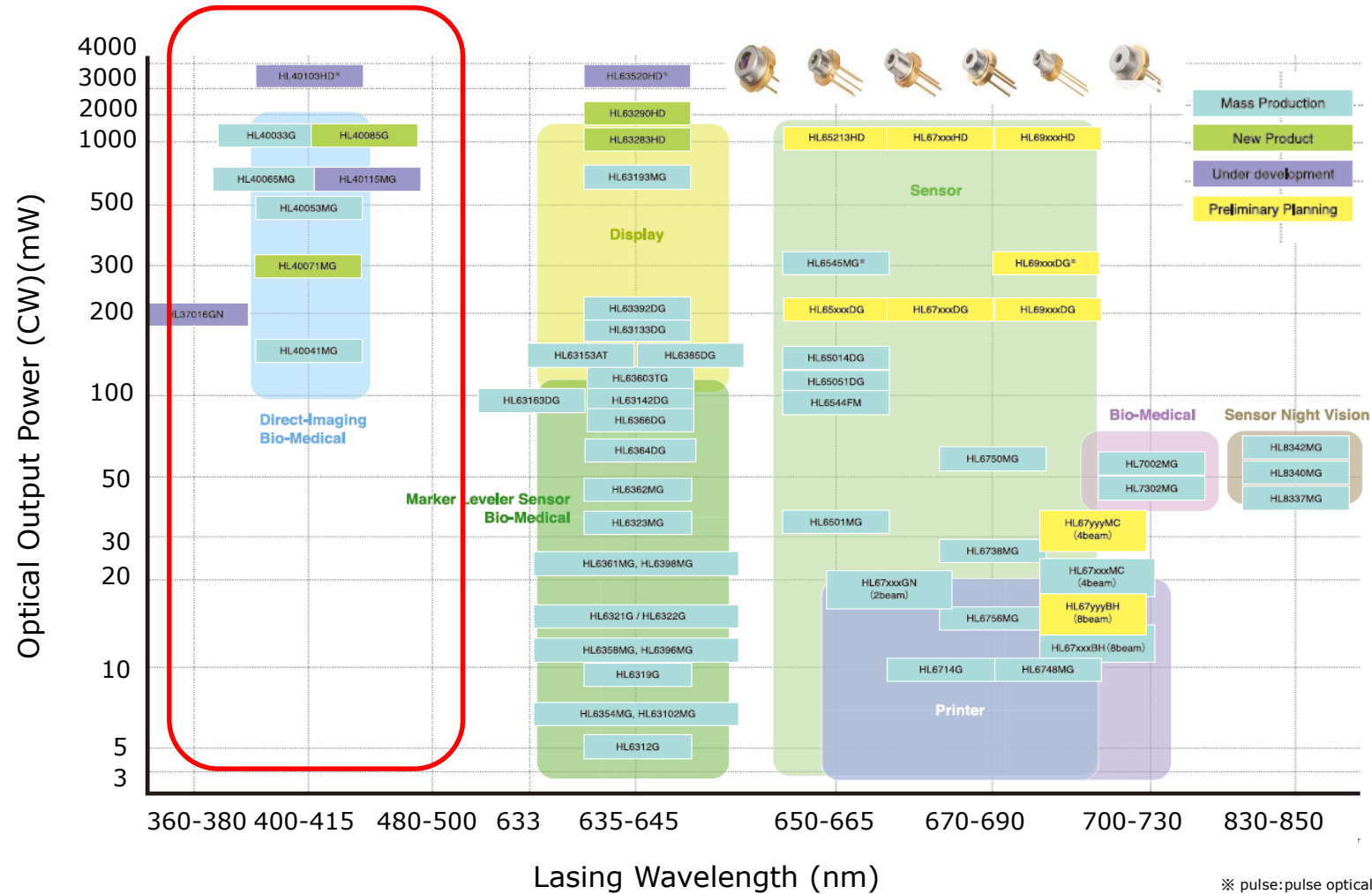


Transfer Molding(Epoxy & Silicon)

Products – Laser diodes



Wavelength : **UV 400nm** ~ **IR 850nm** Power : High 3500_{mW}class ~ Low 5_{mW} class



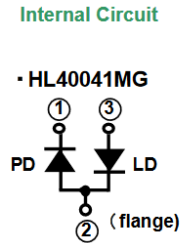
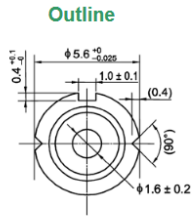
※ pulse:pulse optical power

Violet Laser diodes



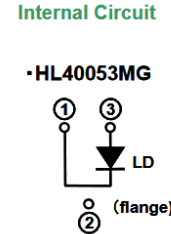
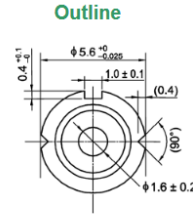
HL40041MG

404nm / 150mW Violet Laser Diode



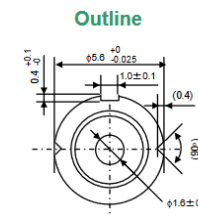
HL40053MG

404nm / 500mW Violet Laser Diode

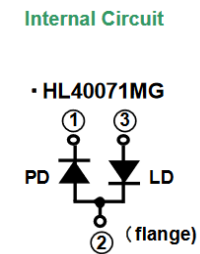


HL40071MG

405nm / 300mW Violet Laser Diode

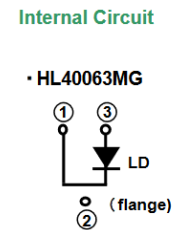
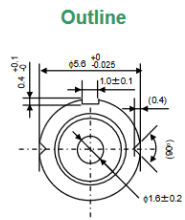


Single transverse mode



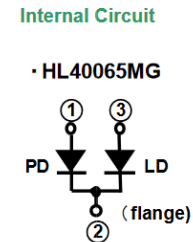
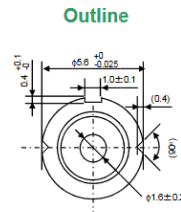
HL40063MG

405nm / 600mW Violet Laser Diode



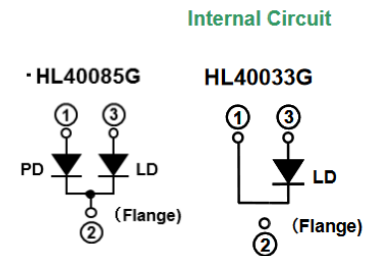
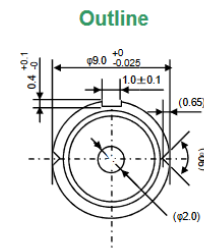
HL40065MG

405nm / 600mW Violet Laser Diode



HL40033G

405nm / 1,000mW Violet Laser Diode



Coming soon:

HL37013/15MG (MM)
 375nm/200mW (CW)
 φ5.6mmPKG, Select m-PD
 Built in Zener Diode

HL40103HD (MM)
 405nm/3.5W (Pulse)
 φ9mmPKG, 2pin, No m-PD

HL40113/15MG (MM)
 405nm/600mW (CW)
 φ5.6mmPKG, Select m-PD
 η_s improving version

Thank you for your attention

Ardan Fuessmann

ardan.fuessmann@ushio.de

<http://www.ushio.eu>

USHIO