

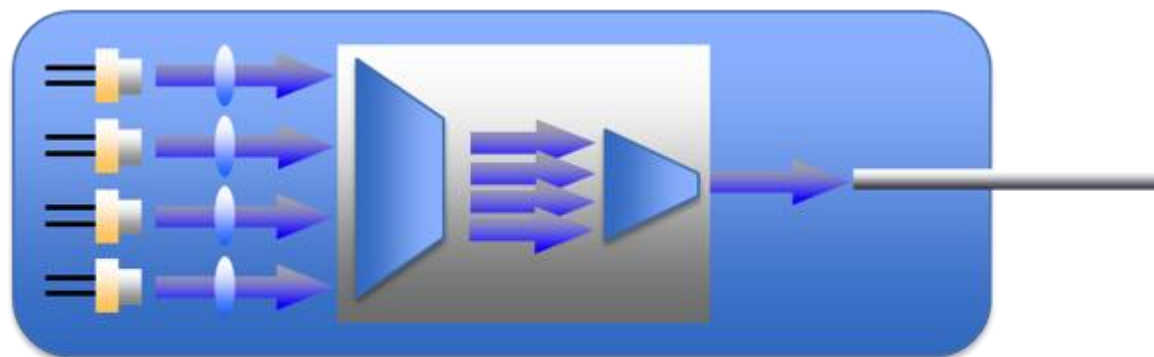
# Subsea EXPO2017

## *BLUE IMPACT*® technical data

# Blue Direct Diode Laser *BLUE IMPACT*<sup>®</sup>

*BLUE IMPACT*<sup>®</sup> series are high power (~20W) blue laser.

We established the super high brightness by using spatial beam combining technique.



Blue diode lasers

Spatial beam combining

Multimode fiber

## ◆ Characteristic

Series		HK5650-0450	HK5650-0405
Wavelength		445 ± 15nm	405 ± 15nm
Power		5, 10, 20W	5, 10W
Optical fiber	Type	multi-mode fiber	
	Connector	D80 or SMA	
	core diameter	100 ± 5μm	
	NA	0.20 ± 0.02	
Cooling system		Air-cooled	
Modulation frequency		<10kHz	

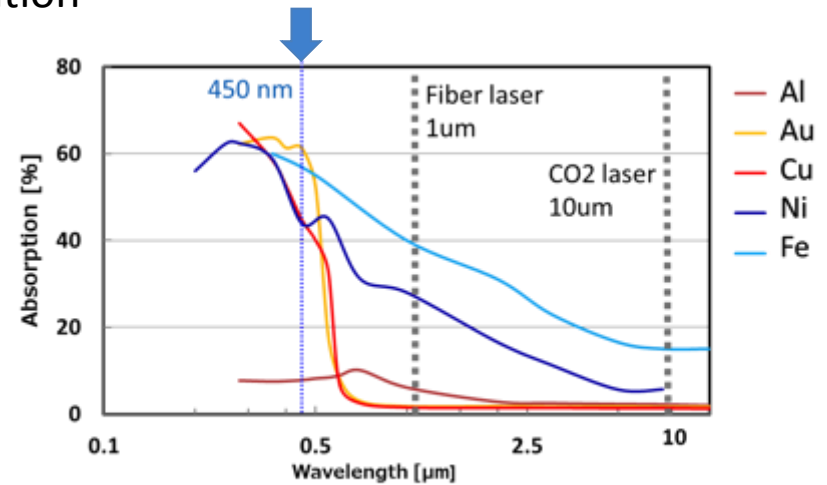
# BLUE IMPACT® Applications

**BLUE IMPACT®** series can apply to the micro laser processing because of the Cu and Au high absorption and to the laser light illumination

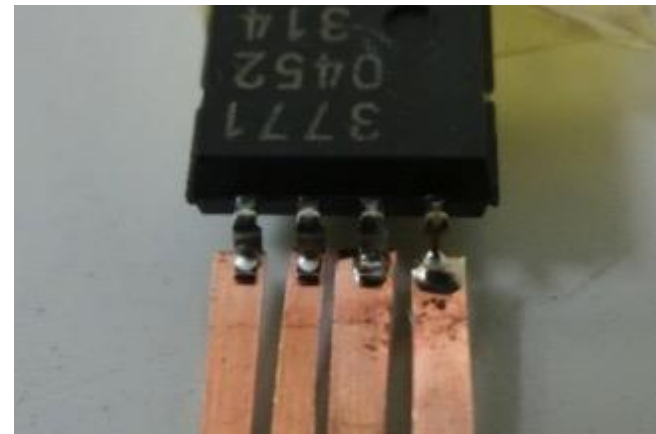
## ◆ Applications

### ① Micro laser processing

- ✦ Micro welding
- ✦ Micro soldering (ex: smart phone)
- ✦ Direct bonding (ex: electronic parts)



Copper welding

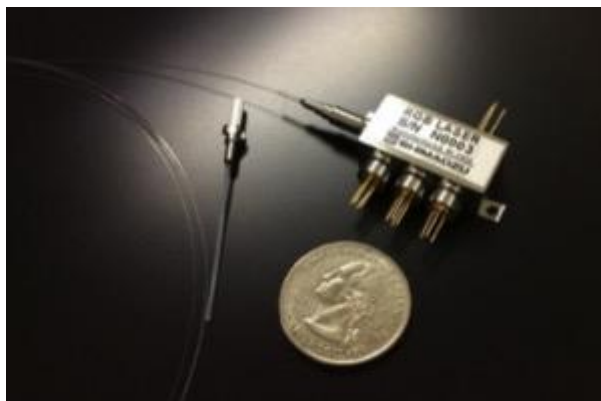


### ② Laser Lighting Illumination

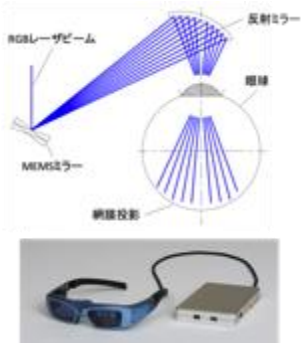
- ✦ Under water lighting  
(Transmit the blue light in the sea)
- ✦ Laser head light  
(+Yellow Phosphor)

# Shimadzu laser lineup

The lineup is wide wavelength range from UV to NIR.



Compact RGB laser **LUMICUBE**  
(connected to single-mode fiber)  
Ex: laser eye ware, pico-projector



High power red and Green laser (10W)  
Ex: laser projector, laser cinema



Low-noise, stable, compact 532nm laser  
Ex: guide light, medical

## Contact Information

Shimadzu corporation (Tokyo office)

E-mail: [sensor@group.shimadzu.co.jp](mailto:sensor@group.shimadzu.co.jp)



# SHIMADZU

## Excellence in Science

### Brand statement “Excellence in Science”

We in the Shimadzu Group have delivered products and services to enable our customers around the world to develop a diverse range of new products, to protect and improve the environment, and to improve the health and lives of mankind. This brand statement represents our sense of pride in this endeavor. It is our commitment to society and ourselves that Shimadzu remains dedicated in our pursuit of technology and accumulation of knowledge, so that we can offer even more outstanding technologies, products, and services, so as to be recognized for excellence in the field of science.