

Multi-wavelength Fiber-coupled Laser Diodes

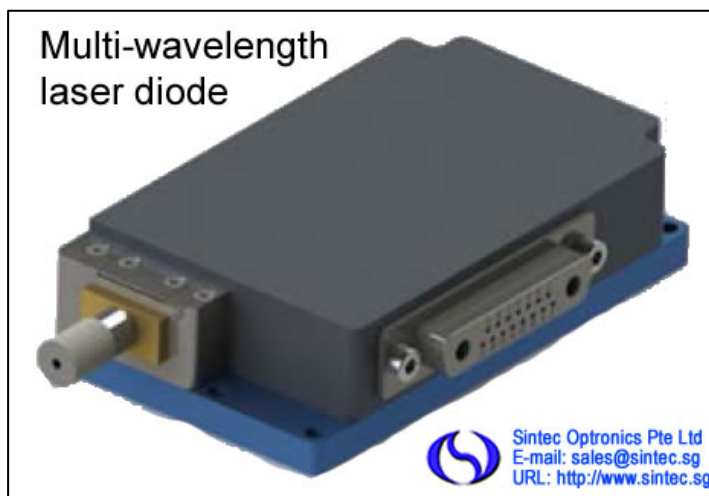
Features:

- Multiple wavelength
- Multiple function
- 200um fiber detachable

Applications:

- Medical use

Our High Power Diode Laser Modules are manufactured by adopting specialized fiber-coupling techniques, resulting in volume products with a high efficiency, stability and superior beam quality. The products are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspecting and burn-in procedures in every aspect come to a result to guarantee each product with the reliability, stability and long lifetime.



Our research staffs are constantly improving and innovating the processing technology in the producing process, based on the professional knowledge and experience accumulated in long-terms. We are also continuously developing new products to meet customers' specific needs.

To provide high quality products with reasonable price is our always goal.

List of Multi-wavelength Laser Diodes

Part number	Wavelength (nm)	Laser power (W)	Fiber (core/NA/connector)
STKA060D100F003G050ML	808/980/450/635nm	6W/10W/5W/0.3W	200μm/0.22/SMA905
STKA250D150F006G050MH	808/980/450/635nm	25W/15W/5W/0.6W	200μm/0.22/SMA905
STKA060D100E060F003ML	808/980/1064/635nm	6W/10W/6W/0.3W	200μm/0.22/SMA905
STKA250D150E100F006MH	808/980/1064/635nm	25W/15W/10W/0.6W	200μm/0.22/SMA905

OPERATING NOTES

- Avoid eye and skin exposure to direct radiation during operation.
- ESD precautions must be taken during storage, transportation and operation.
- Short-circuit is required between pins during storage and transportation.
- Please connect pins to wires by solder instead of using socket when operation current is higher than 6A. Soldering point should be close to the root of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- Make sure the fiber output end is properly cleaned before operation of laser. Follow safety protocols to avoid injury when handling and cutting the fiber.
- Use constant current power supply to avoid surge current during operation.
- Laser diode must be used according to the specifications.
- Laser diode must work with good cooling.
- Operation temperature ranges from 15°C to 35°C.
- Storage temperature ranges from -20°C to +70°C.

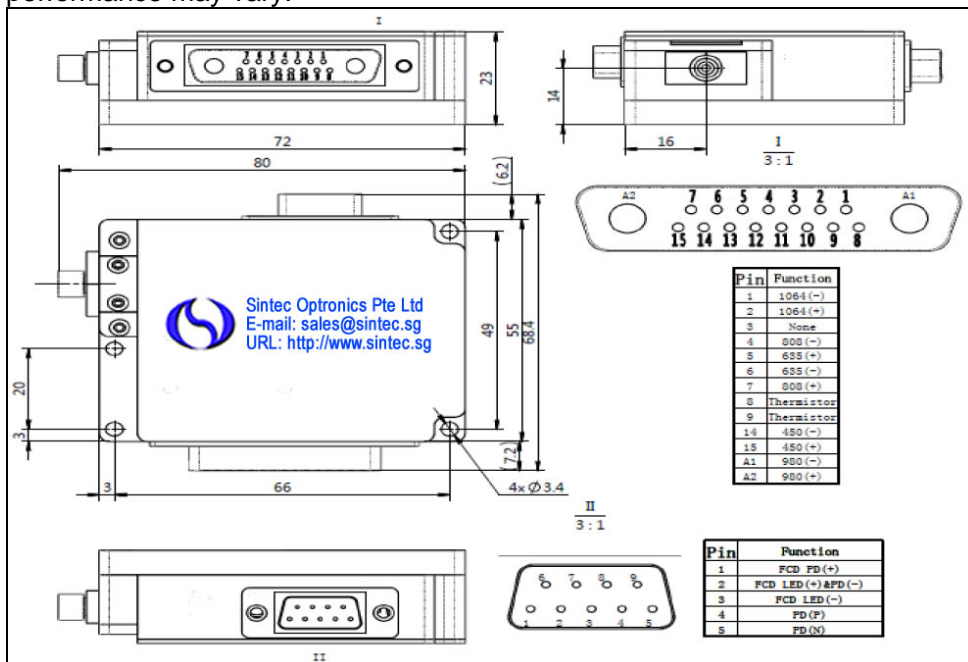
1. STKA060D100F003G050ML

Specifications(25°C)		Symbol	Unit	STKA060D100F003G050ML		
				Minimum	Typical	Maximum
808 ⁽¹⁾	CW Output Power	P _o	W	6	-	-
	Center Wavelength	λ _c	nm	808±10		
	Operating Current	I _{op}	A	-	-	9
	Threshold Current	I _{th}	A	-	0.8	-
	Operating Voltage	V _{op}	V	-	-	2
980 ⁽¹⁾	CW Output Power	P _o	W	10	-	-
	Center Wavelength	λ _c	nm	980±10		
	Operating Current	I _{op}	A	-	-	13.5
	Threshold Current	I _{th}	A	-	1	-
	Operating Voltage	V _{op}	V	-	-	2
635 ⁽¹⁾	CW Output Power	P _o	W	0.3	-	-
	Center Wavelength	λ _c	nm	635±10		
	Operating Current	I _{op}	A	-	-	0.8
	Threshold Current	I _{th}	A	-	0.2	-
	Operating Voltage	V _{op}	V	-	-	2.6
450 ⁽¹⁾	CW Output Power	P _o	W	5	-	-
	Center Wavelength	λ _c	nm	450±10		
	Operating Current	I _{op}	A	-	-	3
	Threshold Current	I _{th}	A	-	-	0.35
	Operating Voltage	V _{op}	V	-	10	-
Fiber Data	Core Diameter	D _{core}	μm	-	200	-
	Numerical Aperture	NA	-	-	0.22	-
	Fiber Connector	-	-	-	SMA905	-
Thermistor	-	R _t	(K Ω)/β(25°C)	-	10±3%/3477	-
PD	-	PD	μA	10	-	-
Other	ESD	V _{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T _{st}	°C	-20	-	70
	Operating Case Temperature ⁽³⁾	T _{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation temperature at 25°C.

(2) A non-condensing environment is required for operation and storage.

(3) Operating temperature defined by the package case. Acceptable operating range is 15-35°C, but performance may vary.



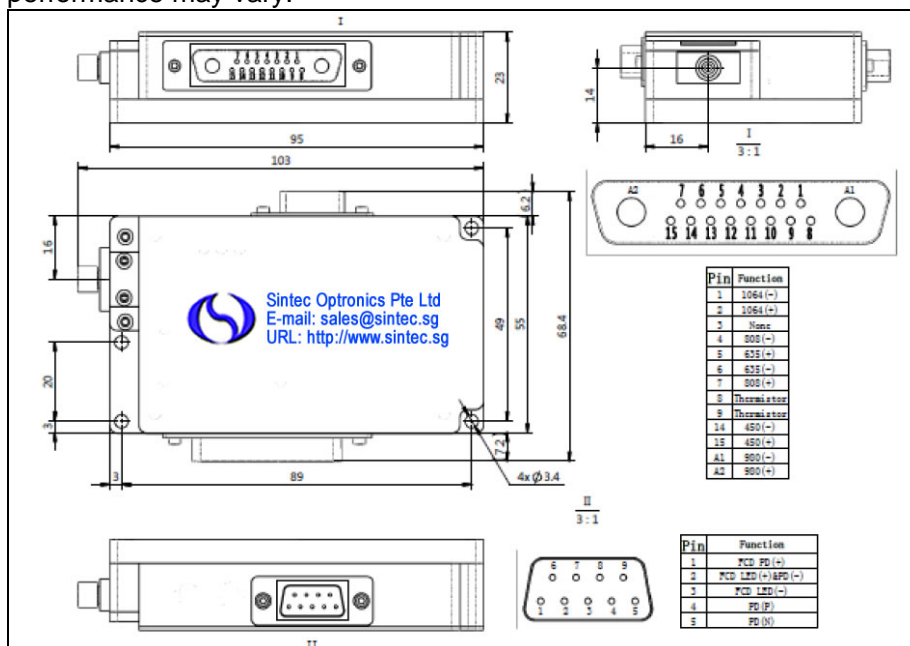
2. STKA250D150F006G050MH

	Specifications(25 °C)	Symbol	Unit	STKA250D150F006G050MH		
				Minimum	Typical	Maximum
808 ⁽¹⁾	CW Output Power	P _o	W	25	-	-
	Center Wavelength	λ _c	nm	808±10		
	Operating Current	I _{op}	A	-	-	9
	Threshold Current	I _{th}	A	-	0.8	-
	Operating Voltage	V _{op}	V	-	-	8
980 ⁽¹⁾	CW Output Power	P _o	W	15	-	-
	Center Wavelength	λ _c	nm	980±10		
	Operating Current	I _{op}	A	-	-	13.5
	Threshold Current	I _{th}	A	-	1	-
	Operating Voltage	V _{op}	V	-	-	4
635 ⁽¹⁾	CW Output Power	P _o	W	0.6	-	-
	Center Wavelength	λ _c	nm	635±10		
	Operating Current	I _{op}	A	-	-	0.8
	Threshold Current	I _{th}	A	-	0.2	-
	Operating Voltage	V _{op}	V	-	-	5.2
450 ⁽¹⁾	CW Output Power	P _o	W	5	-	-
	Center Wavelength	λ _c	nm	450±10		
	Operating Current	I _{op}	A	-	-	3
	Threshold Current	I _{th}	A	-	-	0.35
	Operating Voltage	V _{op}	V	-	10	-
Fiber Data	Core Diameter	D _{core}	μm	-	200	-
	Numerical Aperture	NA	-	-	0.22	-
	Fiber Connector	-	-	-	SMA905	-
Thermistor	-	R _t	(K Ω)/β(25°C)	-	10±3%/3477	-
PD	-	PD	μA	10	-	-
Other	ESD	V _{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T _{st}	°C	-20	-	70
	Operating Temperature ⁽³⁾	T _{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation temperature at 25°C.

(2) A non-condensing environment is required for operation and storage.

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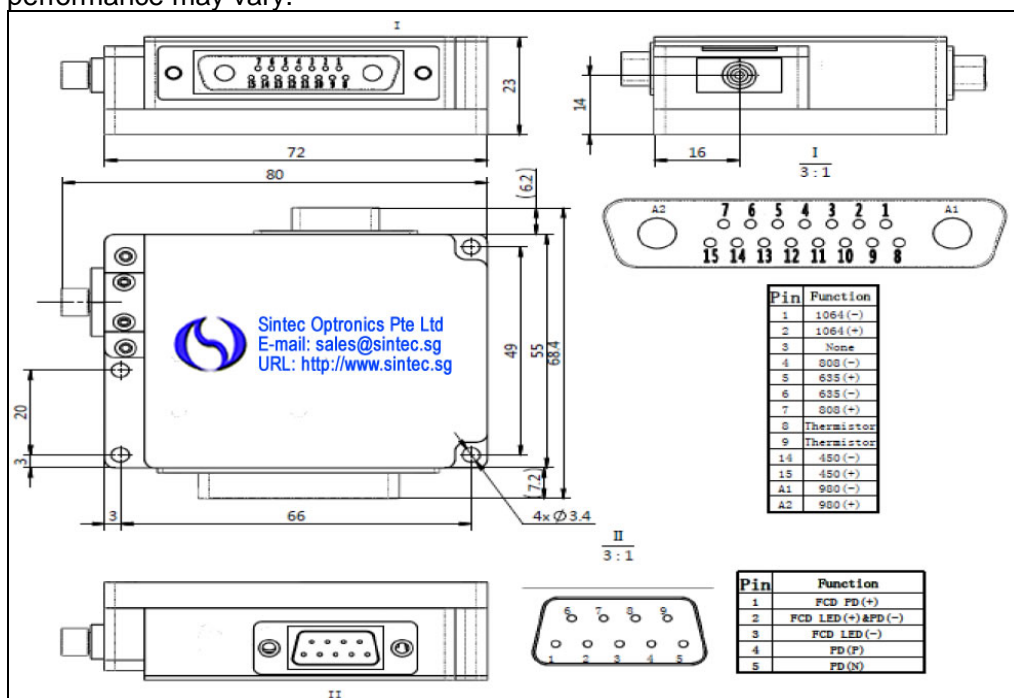
3. STKA060D100E060F003ML

Specifications(25 °C)		Symbol	Unit	STKA060D100E060F003ML		
				Minimum	Typical	Maximum
808 ⁽¹⁾	CW Output Power	P_o	W	6	-	-
	Center Wavelength	λ_c	nm	808±10		
	Operating Current	I_{op}	A	-	-	9
	Threshold Current	I_{th}	A	-	0.8	-
	Operating Voltage	V_{op}	V	-	-	2
980 ⁽¹⁾	CW Output Power	P_o	W	10	-	-
	Center Wavelength	λ_c	nm	980±10		
	Operating Current	I_{op}	A	-	-	13.5
	Threshold Current	I_{th}	A	-	1	-
	Operating Voltage	V_{op}	V	-	-	2
1064 ⁽¹⁾	CW Output Power	P_o	W	6	-	-
	Center Wavelength	λ_c	nm	1064±20		
	Operating Current	I_{op}	A	-	-	11
	Threshold Current	I_{th}	A	-	0.9	-
	Operating Voltage	V_{op}	V	-	2	-
635 ⁽¹⁾	CW Output Power	P_o	W	0.3	-	-
	Center Wavelength	λ_c	nm	635±10		
	Operating Current	I_{op}	A	-	-	0.8
	Threshold Current	I_{th}	A	-	0.2	-
	Operating Voltage	V_{op}	V	-	-	2.6
Fiber Data	Core Diameter	D_{core}	μm	-	200	-
	Numerical Aperture	NA	-	-	0.22	-
	Fiber Connector	-	-	-	SMA905	-
Thermistor	-	R_t	(K Ω)/ β (25°C)	10±3%/3477		
PD	-	PD	μA	10	-	-
Other	ESD	V_{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T_{st}	°C	-20	-	70
	Operating Case Temperature ⁽³⁾	T_{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation temperature at 25°C.

(2) A non-condensing environment is required for operation and storage.

(3) Operating temperature defined by the package case. Acceptable operating range is 15-35°C, but performance may vary.



4. STKA250D150E100F006MH

	Specifications(25 °C)	Symbol	Unit	STKA250D150E100F006MH		
				Minimum	Typical	Maximum
808 ⁽¹⁾	CW Output Power	P _o	W	25	-	-
	Center Wavelength	λ _c	nm	808±10		
	Operating Current	I _{op}	A	-	-	9
	Threshold Current	I _{th}	A	-	0.8	-
	Operating Voltage	V _{op}	V	-	-	8
980 ⁽¹⁾	CW Output Power	P _o	W	15	-	-
	Center Wavelength	λ _c	nm	980±10		
	Operating Current	I _{op}	A	-	-	13.5
	Threshold Current	I _{th}	A	-	1	-
	Operating Voltage	V _{op}	V	-	-	4
1064 ⁽¹⁾	CW Output Power	P _o	W	10	-	-
	Center Wavelength	λ _c	nm	1064±20		
	Operating Current	I _{op}	A	-	-	11
	Threshold Current	I _{th}	A	-	0.9	-
	Operating Voltage	V _{op}	V	-	-	4
635 ⁽¹⁾	CW Output Power	P _o	W	0.6	-	-
	Center Wavelength	λ _c	nm	635±10		
	Operating Current	I _{op}	A	-	-	0.8
	Threshold Current	I _{th}	A	-	0.2	-
	Operating Voltage	V _{op}	V	-	-	5.2
Fiber Data	Core Diameter	D _{core}	μm	-	200	-
	Numerical Aperture	NA	-	-	0.22	-
	Fiber Connector	-	-	-	SMA905	-
Thermistor	-	R _t	(K Ω)/β(25°C)	10±3%/3477		
PD	-	PD	μA	10	-	-
Other	ESD	V _{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T _{st}	°C	-20	-	70
	Operating Case Temperature ⁽³⁾	T _{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation temperature at 25°C.

(2) A non-condensing environment is required for operation and storage.

(3) Operating temperature defined by the package case. Acceptable operating range is 15-35°C, but performance may vary.

