

GFLP-3xxxxxxx

1310nm MQW-FP Laser Diode with pigtail For 1.25Gbps and 2.5Gbps application



Features

- ◆ Coaxial Package
- ◆ InGaAsP/InP MQW-FP laser Diode
- ◆ Low threshold, high slope efficiency and high output power LD
- ◆ Operating case temperature: -40°C to +85°C
- ◆ Single-mode fiber pigtailed with SC, FC, ST or LC connector
- ◆ Optional with Isolator

Applications

- ◆ High Speed Optical Transmission System
- ◆ Test Equipments

Ordering information (Standard version ^{*Note1})

Part No.	λ (nm)	Package series	Pin Type	Isolator	Connector	Data Rate
GFLP-3110AFA1G	1310	A	LD-Pin-1	Single Stage	FC/APC	1.25Gbps
GFLP-3210BSA2G	1310	B	LD-Pin-2	Single Stage	SC/APC	2.5Gbps
GFLP-3105CT1	1310	C	LD-Pin-1	N=None	ST/PC	1.25Gbps
GFLP-3210DFA1G	1310	D	LD-Pin-1	Single Stage	FC/APC	2.5Gbps
GFLP-3210ESA2G	1310	E	LD-Pin-2	Single Stage	SC/APC	2.5Gbps

*Note1: For more ordering information, please refer the nomenclature and contact EOPTOLINK sales.

Absolute maximum ratings ^{*Note2}

Parameter	Symbol	Ratings	Unit
Storage temperature	Tstg	-40~+100	°C
Operating case temperature	Top	-40~+85	°C
Forward current (LD)	I _{fL}	150	mA
Reverse voltage (LD)	V _{rL}	2	V
Reverse voltage (PD)	V _{rP}	15	V
Reverse current (PD)	I _{rP}	2	mA
Soldering temperature (<10s)	Stemp	260	°C

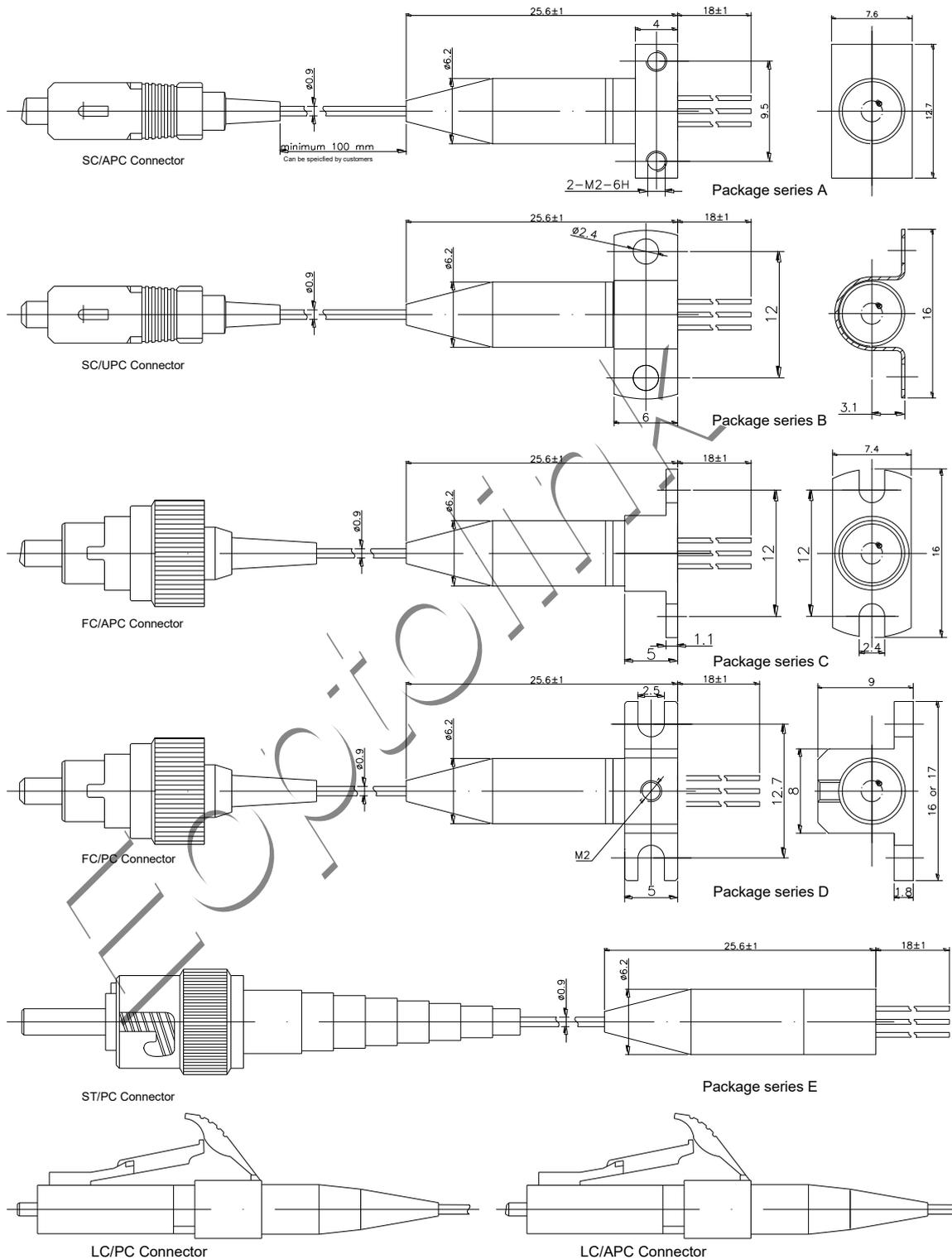
*Note2: Exceeding any one of these values may destroy the device immediately.

Electrical and optical characteristics

(SMF, T_c=+25°C, unless otherwise noted.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Threshold current	I _{th}	CW	—	10	15	mA
		CW, T _c =-40~+85	—	—	40	
Output Power (After coupled)	P _o	CW, I _f =I _{th} +20mA	0.5	1.0	1.5	mW
Operating current	I _f	CW	—	30	40	mA
		CW, T _c =-40~+85	—	40	70	
Operating voltage	V _f	CW, T _c =-40~+85	—	—	1.6	V
Slope efficiency	Se	CW	—	—	0.175	mW/mA
Wavelength	λ _c	CW	1290	1310	1330	nm
Spectral Width	Δλ	CW, RMS, T _c =-40~+85	—	—	3	nm
Tracking error	ΔP _f	I _m hold(@P _f =3mW(25°C)), CW, T _c =-40~+85	-1	—	1	dB
Monitor current	I _m	CW, V _{rP} =5V, T _c =-40~+85	80	—	1000	uA
Monitor dark current	I _d	CW, V _{rP} =5V	—	1	10	nA
Monitor capacitance	C	V _{rP} =5V, f=1MHz	—	—	10	pF
Connector repeatability	—		-1	—	1	dB
Optical Isolation	—	Single Stage	30	—	—	dB

Pigtail Package dimension *Note3. 4. 5. 6



*Note3: PIN direction and laser mark can be customized. Pigtail is standard SM fiber; the length also can be customized.

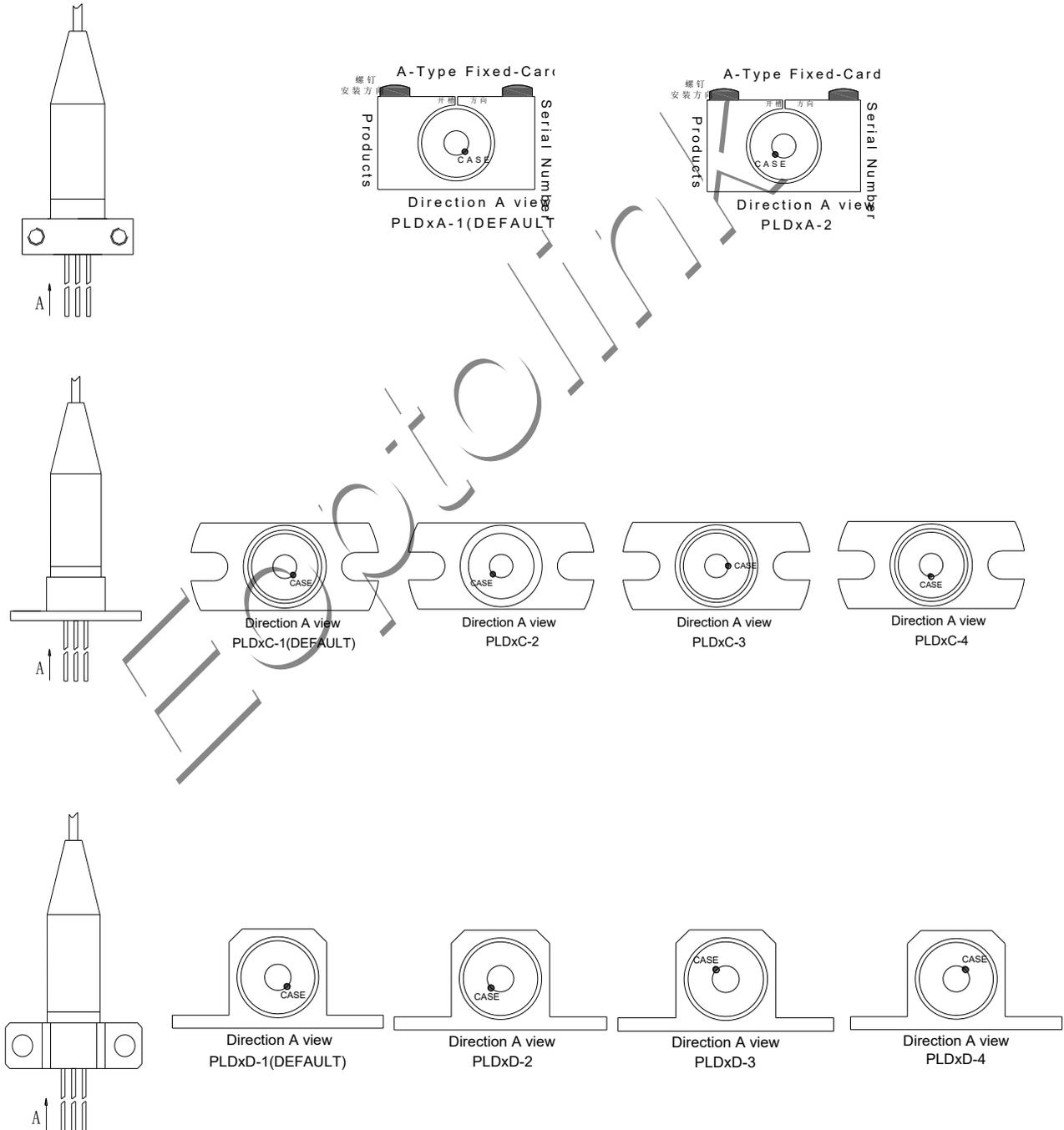
*Note4: For the package series B, No need to fix with glue

*Note5: For the package series D, the clamping rings dimensions (A) and drill size (B) are can be selected. The following types can be available. Please designate the detailed type while ordering the package series D.

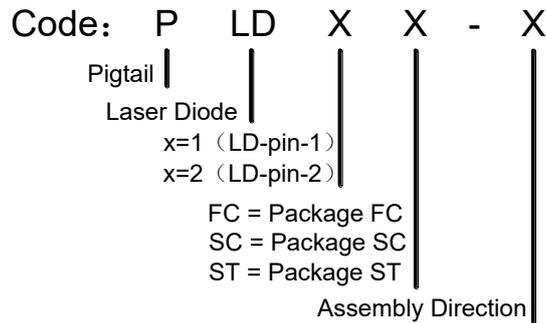
Fixed card type	A(mm)	B(mm)	C(mm)
D0	16	11	7.6
D-S	17	12.7	9

*Note6: For the package series B, the fix card is fixed by customer self. For the detailed information of fix card of A, C, D package series, please refers the following graphs.

The direction of fix card



Nomenclature of assembly direction ^{*Note7. 8}

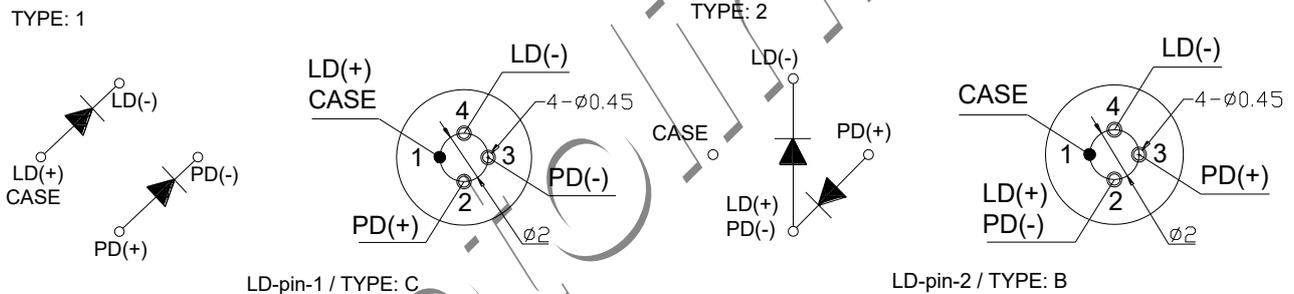


*Note7: Please designate the code of assembly direction.

*Note8: Please Specify the assembly direction code based on the Pin assignment.

For example: PLD1A-1、PLD2C-2、PLD1D-1.

Pin Assignment Pin Assignment



Nomenclature



NO	Parameter	Detailed Description				
A	Wavelength	3=1310				
B	Data rate	1=1.25Gb/s		2=2.5Gb/s		
C	Power	05=0.2-0.99mW		10=1.0-1.99mW		
D	Package series	A	B	C	D	E
E	Connector	F=FC/PC		S=SC/PC		T=ST/PC
		FA=FC/APC		SA=SC/APC		Blank=None
F	Pin Type	1=LD-pin-1			2=LD-pin-2	
G	Isolator	Blank=None			G= Single Stage	
H	Fiber Type	Blank=SM			M=MM	

Precaution

(1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe keeping and carrying, the modules should be packaged with ESD

proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.

(2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.

(3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.

Revision History

Version	Initiated	Reviewed	Approved	Revision History	Release Date
Vb-1	Yinchun.Zhao	Kelly.Cao			2011-6-10
Vb-2	Jack.Jiang	Kelly.Cao Yinchun.Zhao		Changed Details	2013-1-13
Vb-3	Jack.Jiang	Kelly.Cao Yinchun.Zhao		Optical power of revision	2014-12-2
Vb-4	Jack.Jiang	Yinchun.Zhao		Changed the ordering information	2014-12-10
Vb-5	Yinchun.Zhao	James.liu	Vincent.yu	Update the schematic diagram of type D fixed card	2022-1-18
Vb-6	Yinchun.Zhao	James.liu	Vincent.yu	1、 Update the direction of fix card. 2、 Update Nomenclature of assembly direction	2023-08-29

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Contact:

Add: No.127 West Wulian Street, Shuangliu District, Chengdu, 610213, P.R. CHINA

Tel: (+86) 028-67087999

Fax: (+86) 028-67087979

E-mail:sales@eoptolink.com

<http://www.eoptolink.com>