

1550 nm LASER DIODE MODULES

UNCOOLED MQW-FP LD WITH PIGTAIL

FL-5300 SERIES

FEATURES

- 2 1550 nm typical emission wavelength
- 2 High reliability, long operation life
- 2 High temperature operation without active cooling
- 2 Build-in InGaAs monitor

APPLICATION

Trunk Line, FitL

DESCRIPTION

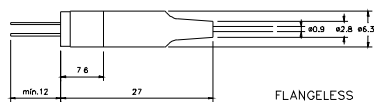
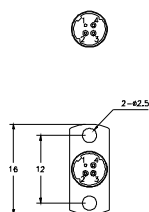
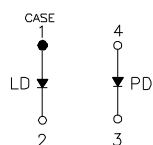
FL-5300 series are designed for coupling a single mode optical fiber with 1550 nm MQW-FP uncooled laser diode. FL-5300 series are the best kits as light sources for telecom and datacom applications.

ELECTRICAL AND OPTICAL CHARACTERISTICS (T _C =25 °C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{th}	Threshold Current	CW		12	15	mA
V _{OP}	Operating Voltage	CW, I _F = I _{th} +20mA		1.2	1.5	V
P _f	Optical Output Power Part No:FL-530X FL-531X FL-532X FL-533X	CW, I _F = I _{th} +20mA	0.2 0.5 1.0 2.0	- - - -	- - - -	mW
λ _c	Center Wavelength	CW, I _{th} +20mA	1520	1550	1580	nm
Δ λ	Spectral Width	CW, I _{th} +20mA, RMS (σ)			3	nm
t _r , t _f	Rise And Fall Times	I _F =I _{th} , I _{th} +20mA, 10~ 90%			0.3	ns
Δ P _f / P _f	Tracking Error	APC, -40~+85 °C	-	-	±1.0	dB
I _m	PD Monitor Current	CW, I _{th} +20mA, V _{RD} =1V	100			μ A
I _D	PD Dark Current	V _{RD} =5V			0.1	μ A
C _t	PD Capacitance	V _{RD} =5V, f=1MHz		10	15	pF

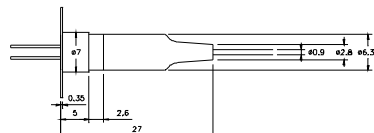
ABSOLUTE MAXIMUM RATINGS (T _C =25 °C)			
Symbol	Parameter	Ratings	Unit
P _o	Optical Output Power (530X/531X/532X/533X)	0.5/1.0/1.5/3	mW
V _{RL}	LD Reverse Voltage	2	V
V _{RD}	PD Reverse Voltage	10	V
I _{FD}	PD Forward Current	1.0	mA
T _{opr}	Operating Temperature	-40~+85	°C
T _{stg}	Storage Temperature	-40~+85	°C

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT

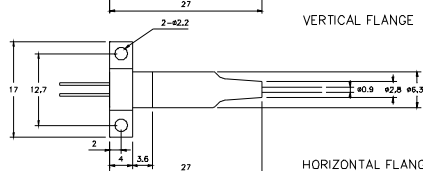
Type A



FLANGELESS



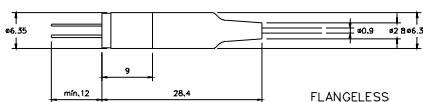
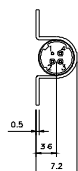
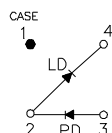
VERTICAL FLANGE



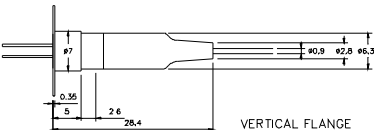
HORIZONTAL FLANGE

FL-530X
FL-531X

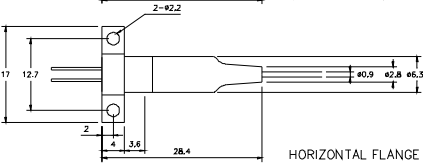
Type B



FLANGELESS



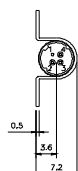
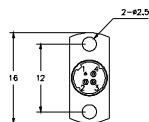
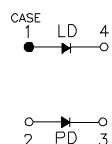
VERTICAL FLANGE



HORIZONTAL FLANGE

FL-532X
FL-533X

Type C



Note: Specifications subject to change without notice.

ORDER INFORMATION

Part No.: F L - 5 3 ☐ ☐ ☐ - ☐ ☐ ☐ ☐

Code	Pout (mw)
0	0.2
1	0.5
2	1
3	2

Code	Pin Assignment
0	Type A
5	Type B
8	Type C

Code	Flange
V	Vertical
H	Horizontal
X	No Flange

Code	Speed
Blank	1.25 Gbps
S	2.5 Gbps

Code	Isolator
Blank	No
S	Single-Stage

Code	Connector
S	SC/PC
F	FC/PC
T	ST/PC
X	No connector
SA	SC/APC
FA	FC/APC
TA	ST/APC