

1550 nm LASER DIODE MODULES**UNCOOLED MQW-FP LD WITH PIGTAIL****FEATURES**

- 2 1550 nm typical emission wavelength
- 2 $P_f \geq 3\text{mW}$ @ $I_{th}+20\text{ mA}$
- 2 High reliability, long operation life
- 2 High temperature operation without active cooling
- 2 Build-in InGaAs monitor

APPLICATION

Trunk Line, FitL

DESCRIPTION

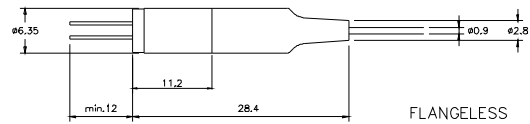
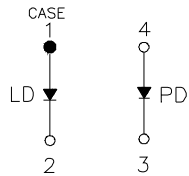
FL-5300 series are designed for coupling a single mode optical fiber with 1550 nm MQW-FP uncooled laser diode. FL-5300 series are the best kits as light sources for telecom and datacom applications.

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, $I_F = I_{th}+20\text{mA}$		1.2	1.5	V
P_f	Optical Output Power	CW, $I_F = I_{th}+20\text{mA}$	3.0			mW
λ_c	Center Wavelength	CW, $I_{th}+20\text{mA}$	1520	1550	1580	nm
$\Delta \lambda$	Spectral Width	CW, $I_{th}+20\text{mA}$, RMS (σ)			3	nm
t_r, t_f	Rise And Fall Times	$I_F = I_{th}$, $I_{th}+20\text{mA}$, 10~ 90%			0.3	ns
$\Delta P_f / P_f$	Tracking Error	APC, -40~+85 °C	-	-	± 1.0	dB
I_m	PD Monitor Current	CW, $I_{th}+20\text{mA}$, $V_{RD}=1\text{V}$	100			μA
I_D	PD Dark Current	$V_{RD}=5\text{V}$			0.1	μA
C_t	PD Capacitance	$V_{RD}=5\text{V}$, $f=1\text{MHz}$		10	15	pF

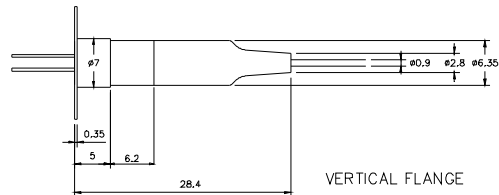
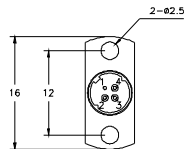
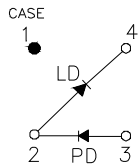
ABSOLUTE MAXIMUM RATINGS (T_C=25 °C)			
Symbol	Parameter	Ratings	Unit
P_o	Optical Output Power	4	mW
V_{RL}	LD Reverse Voltage	2	V
V_{RD}	PD Reverse Voltage	10	V
I_{FD}	PD Forward Current	1.0	mA
T_{opr}	Operating Temperature	-40~+85	°C
T_{stg}	Storage Temperature	-40~+85	°C

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT

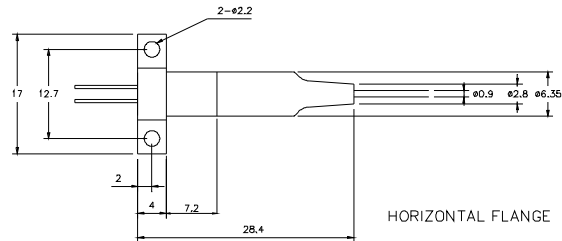
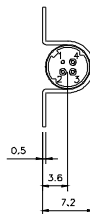
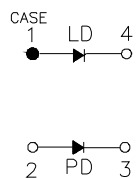
Type A



Type B



Type C



Note: Specifications subject to change without notice.

ORDER INFORMATION

Part No.: F L - 5 3 4 ☐ ☐ - ☐ ☐ ☐

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

Code	Speed
Blank	1.25 Gbps
S	2.5 Gbps

Code	Flange
V	Vertical
H	Horizontal
X	No Flange

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