

## LDP-FC-XXZ-X-T-XXXXXX-XS-XX



### Features

- 1310nm or 1550nm Wavelength
- High Optical Power
- Low Threshold Current
- High Operating Temperature
- High Speed
- Uncooled
- Mini Housing Package
- Singlemode & Multimode Fiber Pigtail
- RoHS Compliant available

### Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Condition	Rating	Unit
LD Reverse Voltage	$V_{RLD}$	CW	2.5	V
LD Forward Current	$I_F$	CW	150	mA
PD Forward Current	$I_{FPD}$	CW	2.0	mA
PD Reverse Voltage	$V_{RPD}$	CW	15	V
Operating Temperature	$T_{opr}$	-	-40 ~ 85	°C
Storage Temperature	$T_{stg}$	-	-40 ~ 85	°C

### (All optical data refer to a coupled 9/125µm SM & 50/125µm M/M fiber)

### Optical and Electrical Characteristics 1310nm (Tc=25°C)

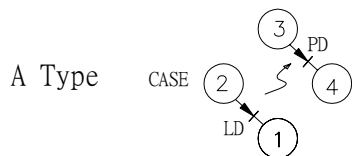
Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Wavelength	$\lambda$	1290	1310	1330	nm	CW
Spectral Width	$\Delta\lambda$	-	2	5	nm	CW(RMS)
Threshold Current	$I_{th}$	-	20	35	mA	CW
Output Power (SM, 9/125µm)						
L		200	-	500	µW	CW, Iop=Ith+20mA Kink free
M	$P_f$	500	-	1000		
H		1000	-	-		
U		2000	-	-		
Output Power(MM, 50/125µm)						
L		200	-	500	µW	CW, Iop=Ith+20mA Kink free
M	$P_f$	500	-	1000		
H		1000	-	-		
U		2000	-	-		
Rise Time/Fall Time	$T_r/T_f$	-	0.5	-	ns	
Forward Voltage	$V_f$	-	1.2	1.7	V	CW
Tracking error	$\Delta P_f/P_f$	-	±1.5	-	dB	-40 to +85°C
Monitor Current	$I_{PD}$	0.05	-	-	mA	CW(Iop)
Monitor Dark Current	$I_D$	-	0.3	1.0	µA	Vrd=5V
Monitor Capacitance	$C_{PD}$	-	10	-	pF	F=1MHz, Vrd=5V

(All optical data refer to a coupled 9/125μm SM & 50/125μm M/M fiber)

Optical and Electrical Characteristics 1550nm (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Wavelength	$\lambda$	1530	1550	1570	nm	CW
Spectral Width	$\Delta\lambda$	-	3	5	nm	CW(RMS)
Threshold Current	$I_{th}$	-	20	35	mA	CW
Output Power (SM, 9/125μm)	$P_f$	200	-	500	μW	CW, $I_{op}=I_{th}+25mA$ Kink free
L		500	-	1000		
M		1000	-	-		
H		2000	-	-		
Output Power(MM, 50/125μm)	$P_f$	200	-	500	μW	CW, $I_{op}=I_{th}+25mA$ Kink free
L		500	-	1000		
M		1000	-	-		
H		2000	-	-		
U	-	-	-	-	-	-
Rise Time/Fall Time	$T_r/T_f$	-	0.5	-	ns	
Foward Voltage	$V_f$	-	1.2	1.7	V	CW
Tracking error	$\Delta P_r/P_f$	-	$\pm 1.5$	-	dB	-40 to +85°C
Monitor Current	$I_{PD}$	0.05	-	-	mA	CW( $I_{op}$ )
Monitor Dark Current	$I_D$	-	0.3	1.0	μA	$V_{rd}=5V$
Monitor Capacitance	$C_{PD}$	-	10	-	pF	$F=1MHz, V_{rd}=5V$

### LD Pin Assignment



- Pin 1 : Laser Cathode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Monitor Diode Anode
- Pin 4 : Monitor Diode Cathode

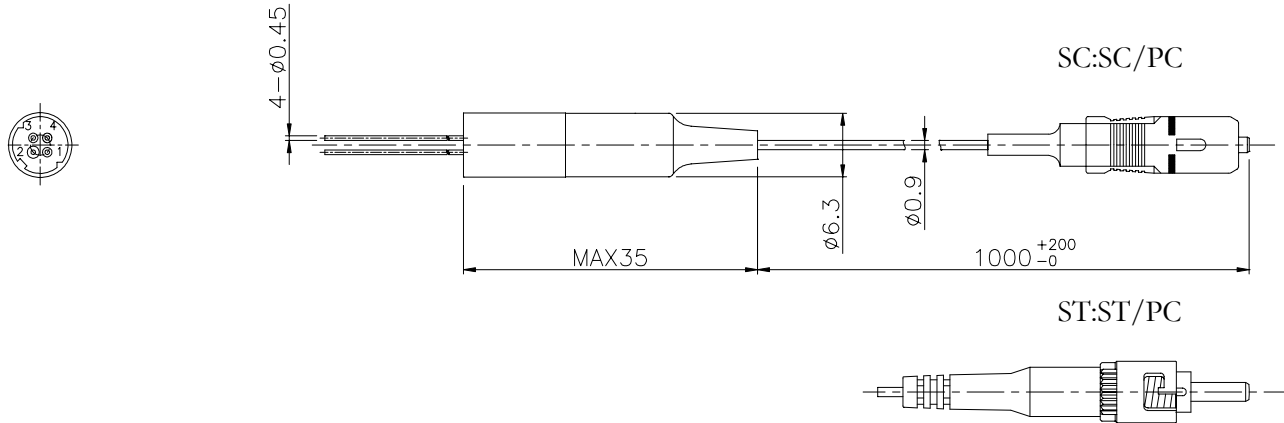


- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode

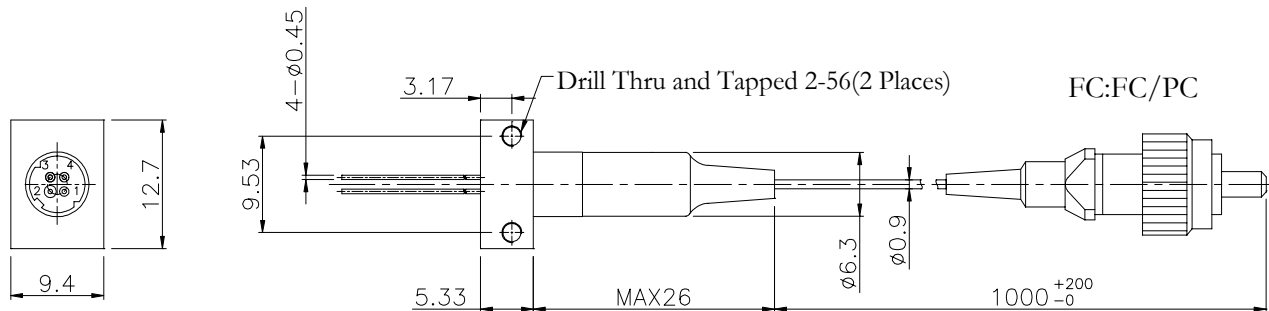
Outline Drawing

Units in mm

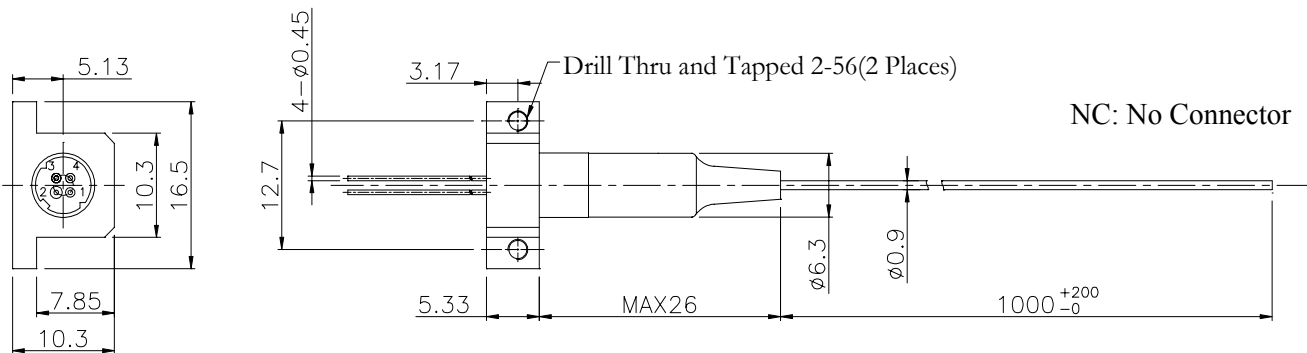
Flange Type : N - NC package



Flange Type : C - SP package



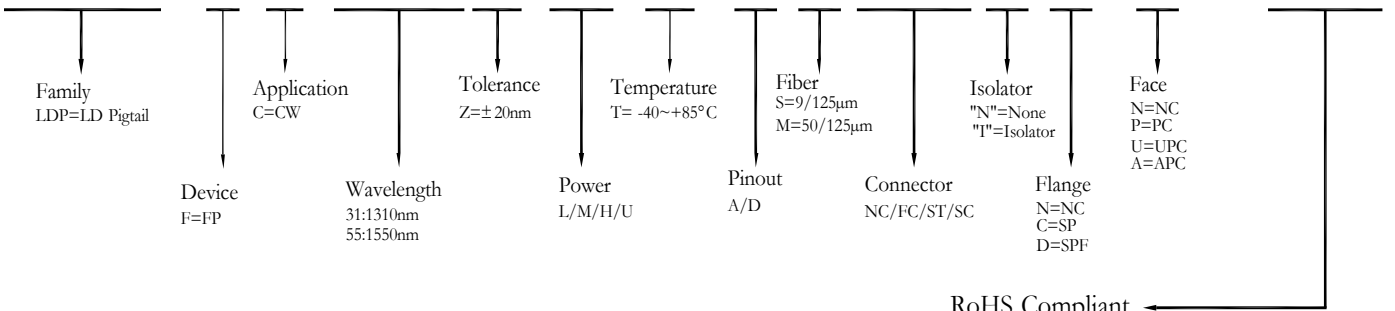
Flange Type : D - SPF package



LDP-FC-XXZ-X-T-XXXXXX-XS-XX

Ordering Information

LDP-FC-XXZ-X-T-XXXXXX-XS-XX



RoHS Compliant  
 -/G5/GR  
 Blank = RoHS non-compliant product  
 G5 = RoHS 5/6-compliant product (lead exemption)  
 GR = Full RoHS compliant product (no exemption)

Warnings:

**Handling Precautions:** This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.  
**Laser Safety:** Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

Legal Notes:

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