

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	λ	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)	P_f	200	-	500	µW	CW, $I_{op}=I_{th}+20mA$ Kink free
L		500	-	1000		
M		1000	-	-		
H		2000	-	-		
Output Power(MM, 50/125µm)	P_f	200	-	500	µW	CW, $I_{op}=I_{th}+20mA$ 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	$\Delta P_f/P_f$	-	±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	Vrd=5V
Monitor Capacitance	C_{PD}	-	10	-	pF	F=1MHz, Vrd=5V

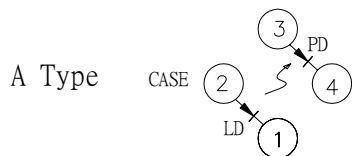
LDP-FC-XXZ-X-T-XXXXXX-XS-XX

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

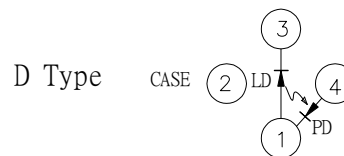
Optical and Electrical Characteristics 1550nm (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Wavelength	λ	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	$\Delta P_r/P_f$	-	± 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

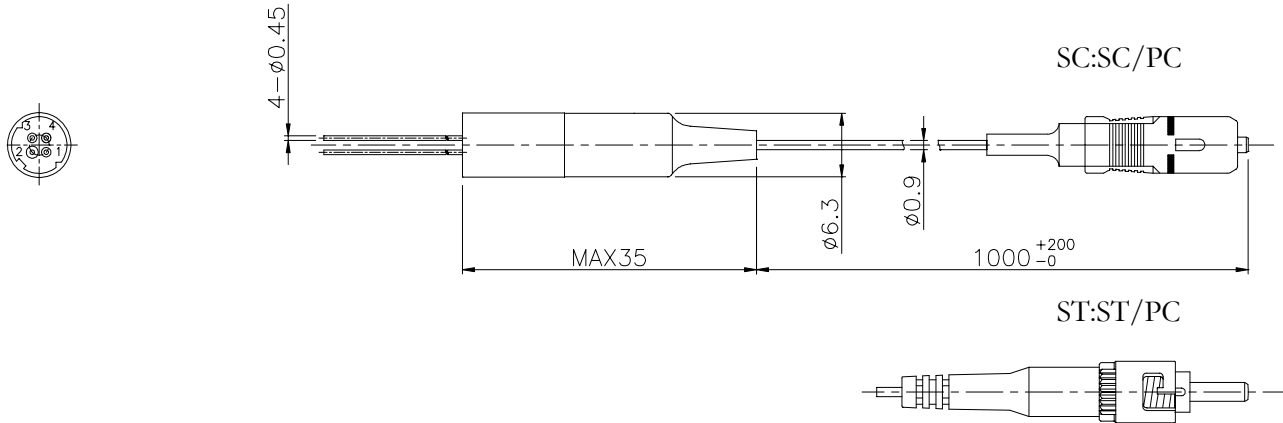


- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode

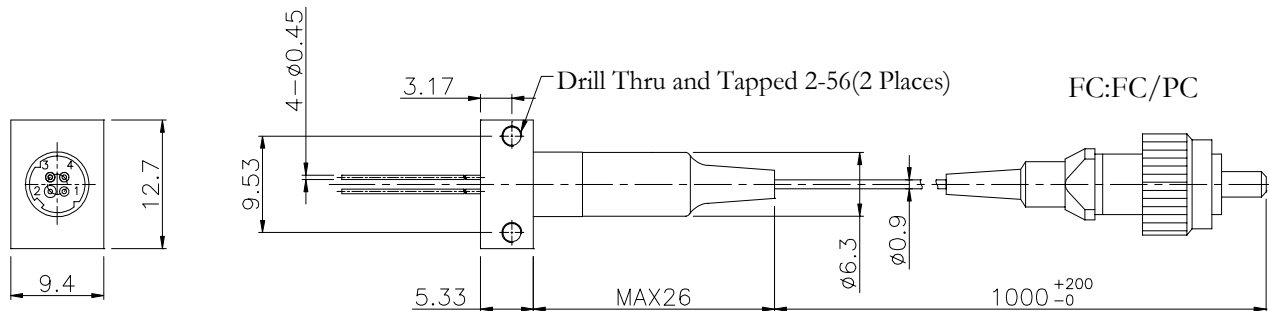
Outline Drawing

Units in mm

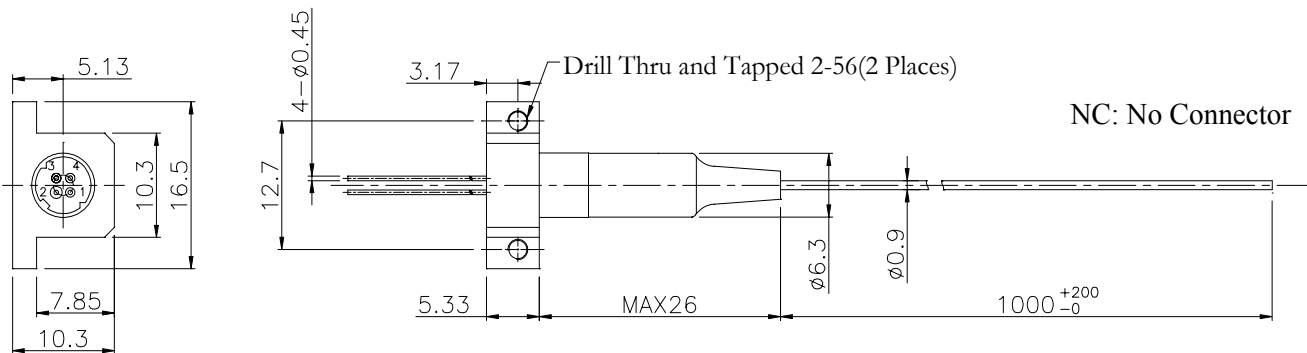
Flange Type : N - NC package



Flange Type : C - SP package



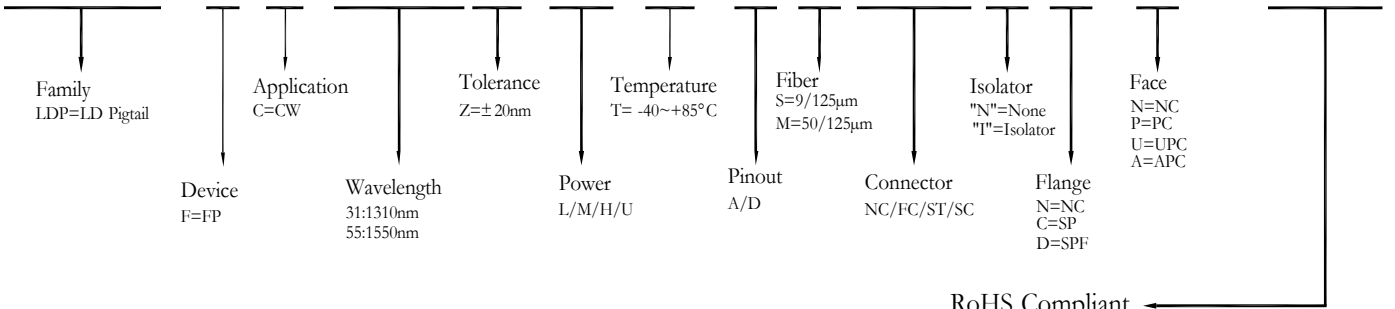
Flange Type : D - SPF package



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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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