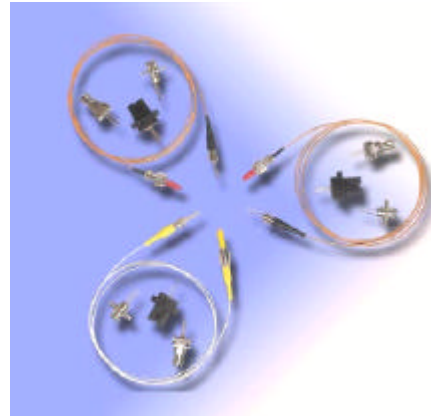


# 1.25Gbps 1550nm DFB Laser Diode Module

## Features

- Center wavelength 1550nm
- Low threshold current
- High speed  $t_r/t_f < 0.4\text{ns}$
- Built-in InGaAs monitor detector
- Four-lead package
- Wide operating temperature  $-20^\circ\text{C}$  to  $85^\circ\text{C}$
- Hermetically sealed TO-18 package in pigtailed or receptacle housing with FC, ST or SC connector



1.25Gbps 1550nm DFB Laser Diode Module

## Applications

- Fiber In The Loop
- ATM, SONET/SDH
- Motorway and railway networks
- Intra and interoffice links
- Subscriber loops
- Trunk supervision

## Specifications

### Optical And Electrical Characteristics ( $T=25\pm 3^\circ\text{C}$ unless specified otherwise)

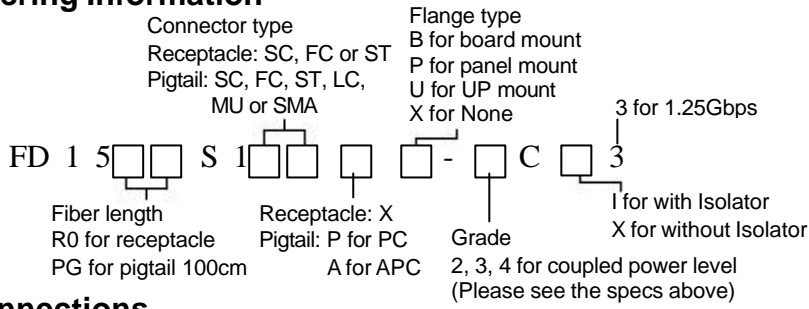
Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Peak Wavelength	$\lambda_c$	$P_o, T_o=-20\sim 85^\circ\text{C}$	1530	1550	1570	nm
Threshold Current	$I_{th}$	$P_o, T_c=85^\circ\text{C}$	-	10 35	30 50	mA
Operating Voltage	$V_{op}$	$P_o$	-	1.1	1.8	V
Optical Output Power	$P_o$	$I_{th}+30\text{mA}$				
-2			0.4	-	-	mW
-3			0.7	-	-	mW
-4			1.2	-	-	mW
Side Mode Suppression Ratio	SMSR	$P_o, T_o=-20\sim +85^\circ\text{C}$	30	40		dB
Rise/Fall Time	$t_r/t_f$	1.25Gbps, 10~90%	-	200	400	ps
Tracking Error	TE	$P_o, T_o=-20\sim +85^\circ\text{C}$	-1.0	-	1.0	dB
Monitor Current (PD)	$I_m$	$P_o, V_{RD}=1\text{V}, R_L=10\Omega$	0.05	0.5	-	mA
Dark Current (PD)	$I_d$	$V_{RD}=5\text{V}$	-	-	1.0	$\mu\text{A}$
Capacitance (PD)	$C_t$	$V_{RD}=5\text{V}, f=1\text{MHz}$	-	10	20	pF
Minimum Isolation (w/isolator)		$T_o= 0\sim +60^\circ\text{C}$	40	-	-	dB

## Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Optical Output Power	$P_o$		3	mW
Operating Current (LD)	$I_{op}$	-	150	mA
Reverse Voltage (LD)	$V_{RL}$	-	2	V
Reverse Voltage (PD)	$V_{RD}$	-	20	V
Forward Current (PD)	$I_{FD}$	-	2	mA
Case Temperature	$T_o$	-20	+85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40	+100	$^\circ\text{C}$
Lead Soldering Temperature (10sec)	$T_L$	-	260	$^\circ\text{C}$

# 1.25Gbps 1550nm DFB Laser Diode Module

## Ordering Information



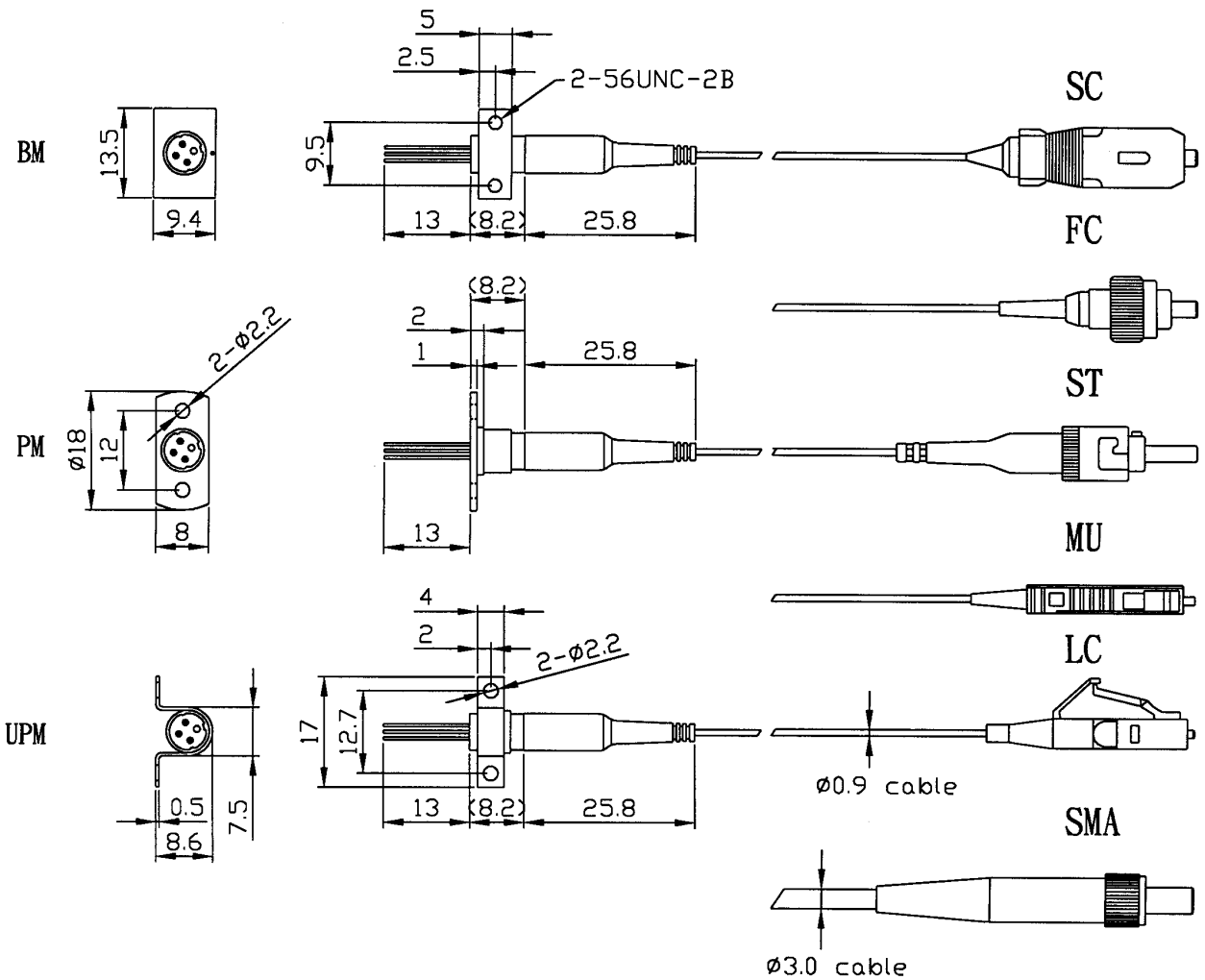
## Pin Connections

### BOTTOM VIEW



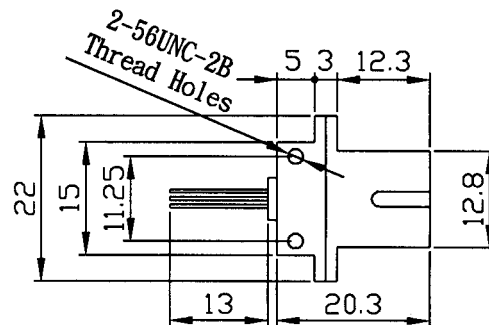
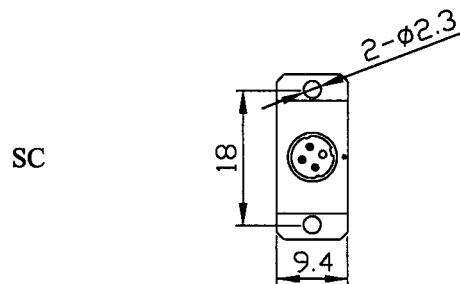
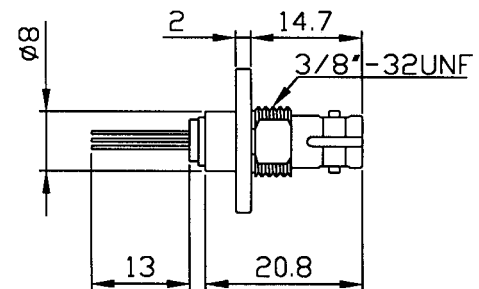
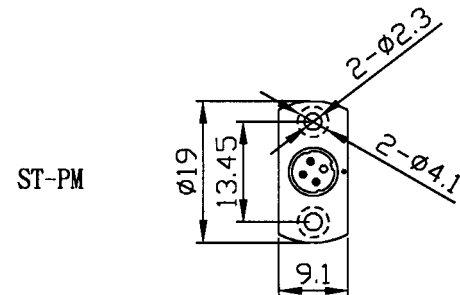
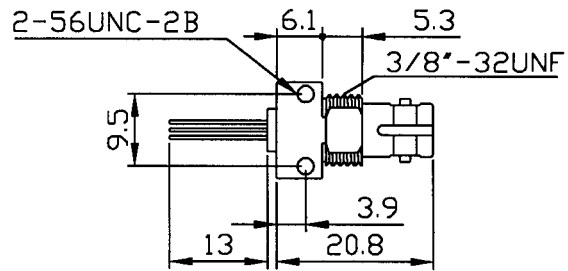
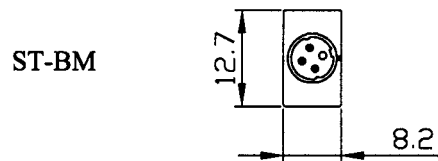
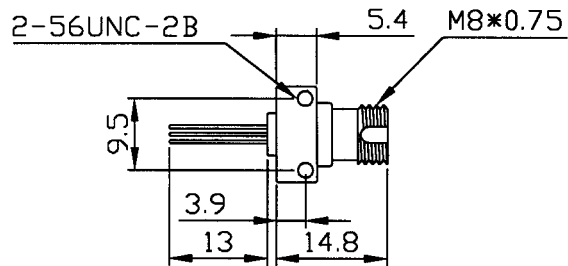
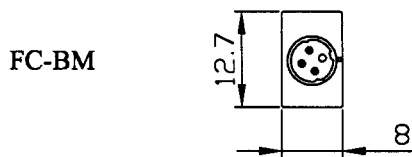
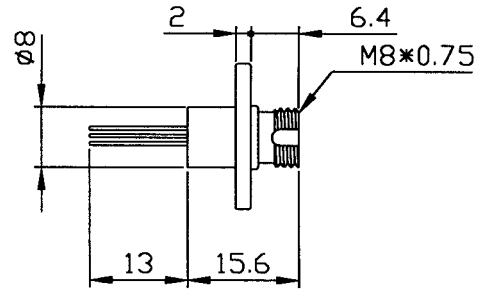
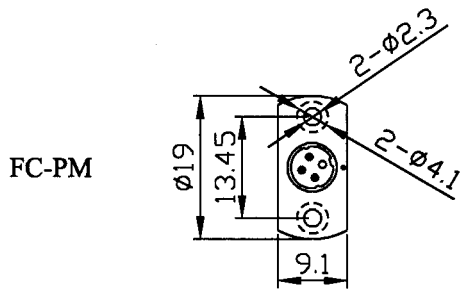
## Dimension

### Pigtail Type



# 1.25Gbps 1550nm DFB Laser Diode Module

Receptacle Type



1.25Gbps 1550nm DFB Laser Diode Module