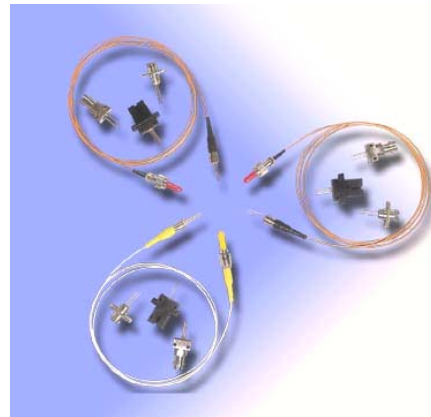


2.5Gbps CWDM Laser Diode Module

Features

- Center wavelengths 1470 to 1610nm +/-3nm
- Low threshold current
- High speed $t_r/t_f < 0.15\text{ns}$
- Built-in InGaAs monitor detector
- Four-lead package
- Wide operating temperature -20°C to 85°C
- Hermetically sealed TO-18 package in pigtailed or receptacle housing with FC, ST or SC connector



2.5Gbps CWDM Laser Diode Module

Specifications

Optical And Electrical Characteristics (T=25+/-3 °C unless specified otherwise)

Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Peak Wavelength	λ_c	Po, To=-20~85°C	1470 to 1610nm +/-3 Spacing 20nm			nm
Spectral Width (-20dB)		Po	-	-	1	nm
Threshold Current	I_{th}	Po Po, Tc=85°C	-	10 35	30 50	mA
Operating Voltage	V_{op}	Po	-	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	Po, To= -20~+85 °C	30	40	-	dB
Temp Coefficient of Peak Wavelength	$d\lambda/dT$	CW, Po, -10~85C	-	0.1	-	nm/ ° C
Rise time/Fall time	t_r/t_f	2.5Gbps, 10~90%	-	100	120	ps
Tracking Error	TE	Po, To=-20~+85 °C	-1.0	-	1.0	dB
Monitor Current (PD)	I_m	Po, $V_{RD}=1\text{V}$, $R_L=10\Omega$	0.05	0.5	-	mA
Dark Current (PD)	I_d	$V_{RD}=5\text{V}$	-	-	1.0	μA
Capacitance (PD)	Ct	$V_{RD}=5\text{V}$, f=1MHZ	-	8	10	pF
Minimum Isolation		To= 0~+60 °C	40	-	-	dB

Absolute Maximum Ratings

Parameter	Symbol	Condition	Patings	unit
Optical Output Power	Po	CW	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	To		-20~+85	°C
Storage Temperature	Tstg		-40~+100	°C
Lead soldering Temperature (10see)	T_L		260	°C

Ordering Information

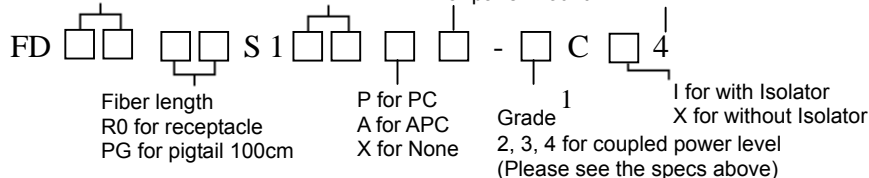
Wavelength

47 for 1470nm 49 for 1490nm
 51 for 1510nm 53 for 1530nm
 55 for 1550nm 57 for 1570nm
 59 for 1590nm 61 for 1610nm

Connector type
 SC, FC or ST

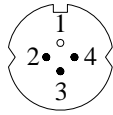
Flange type
 B for board mount
 P for panel mount

4 for 2.5Gbps



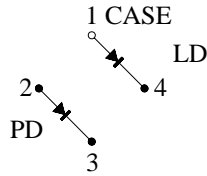
Pin Connections

BOTTOM VIEW

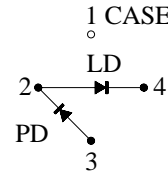


UNIT : MM

C TYPE PIN CONNECTIONS

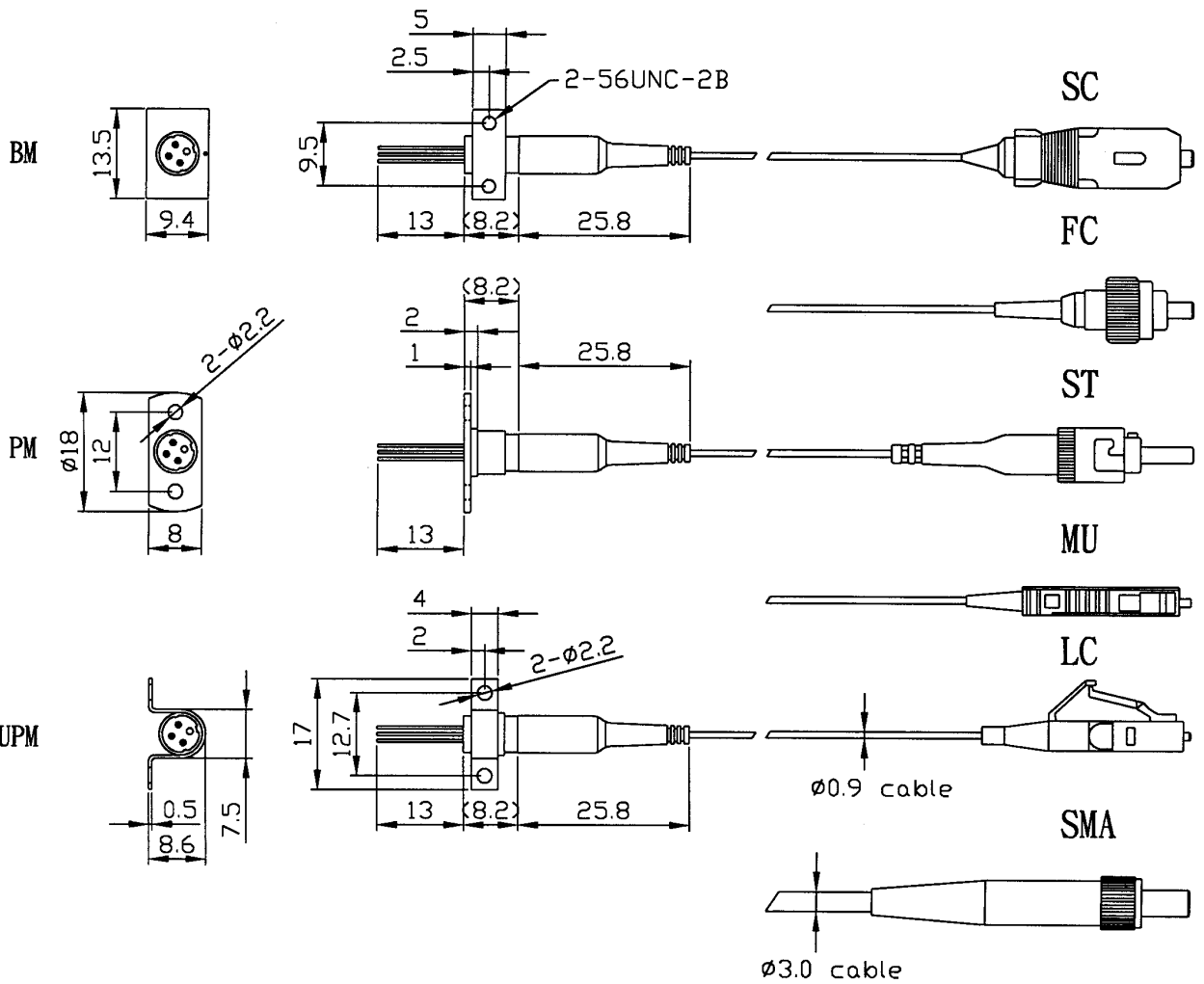


D TYPE PIN CONNECTIONS



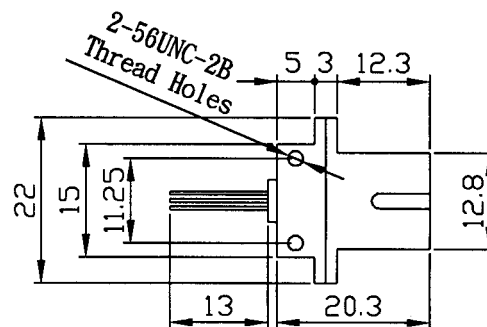
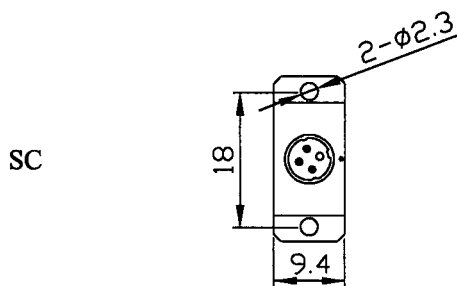
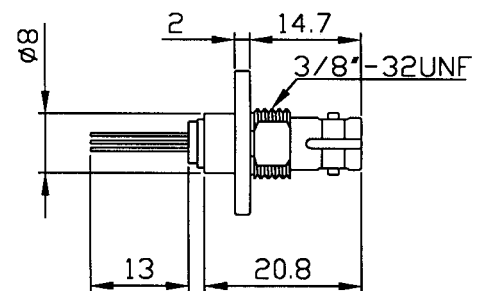
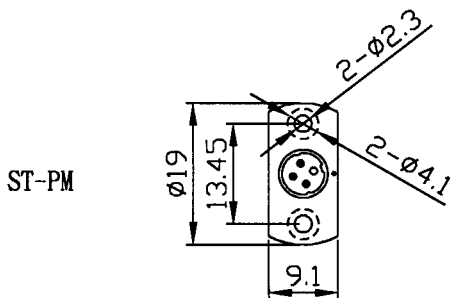
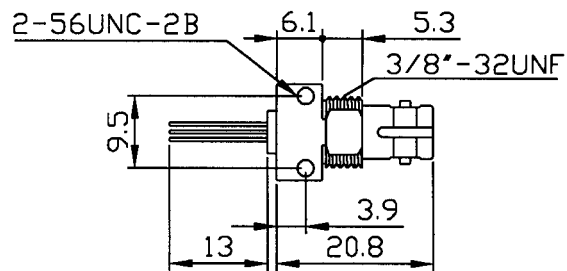
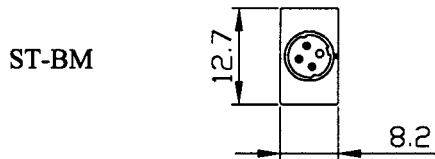
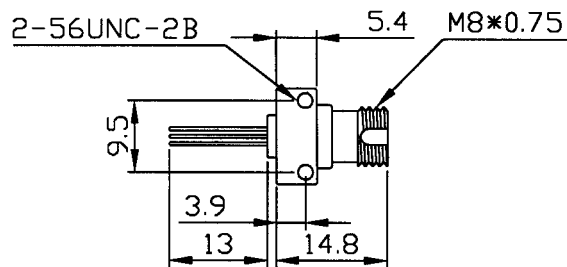
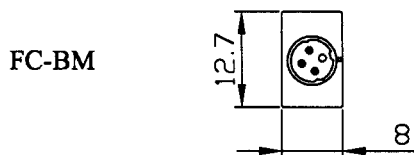
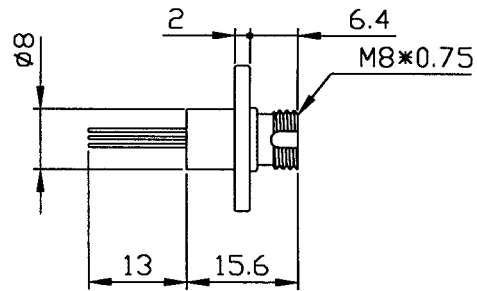
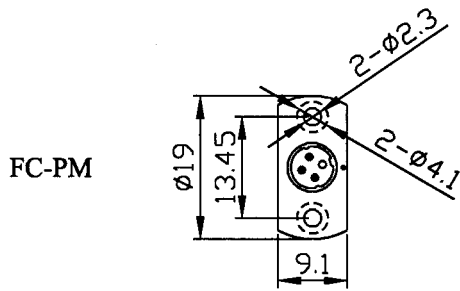
Dimension

Pigtail Type



2.5Gbps CWDM Laser Diode Module

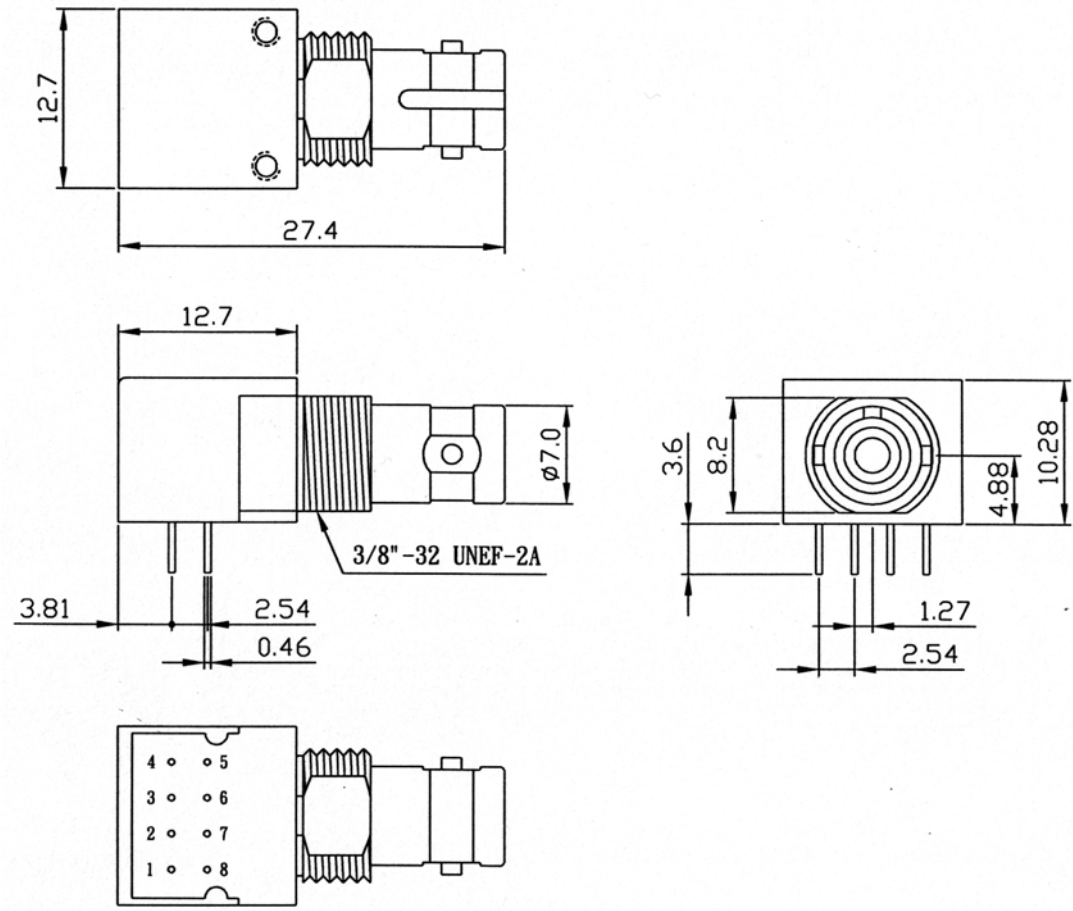
Receptacle Type



2.5Gbps CWDM Laser Diode Module

Sugar Cube

Dimension (ST Receptacle) Unit mm



Pin Connections (Type A)

PIN No.	FUNCTION
1	NC
2	ANODE
3	CATHODE
4	NC
5	NC
6	ANODE or NC
7	ANODE or NC
8	NC

Pin Connections (Type B)

PIN No.	FUNCTION
1	NC
2	NC
3	LD Cathode (LD-)
4	NC
5	NC
6	LD Anode (LD+), PD-
7	Monitor PD Anode (PD+)
8	NC