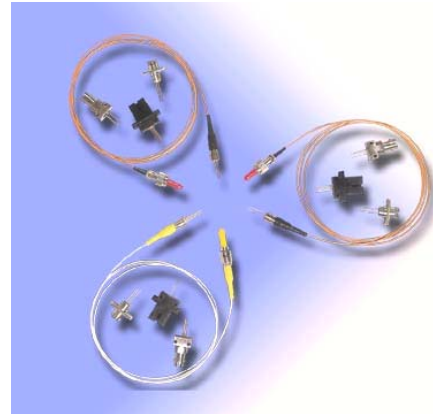


1.25Gbps CWDM Laser Diode Module

Features

- Center wavelengths 1470 to 1610nm +/-3nm
- 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°C to 85°C
- Hermetically sealed TO-18 package in pigtailed or receptacle housing with FC, ST or SC connector



1.25Gbps 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	$P_o, T_o = -20 \sim 85^\circ\text{C}$	1470 to 1610nm +/-3 Spacing 20nm			nm
Threshold Current	I_{th}	$P_o, T_c = 85^\circ\text{C}$	-	10	30	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	$P_o, T_o = 0 \sim +85^\circ\text{C}$	30	40	-	dB
Rise time/Fall time	tr/ff	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	μA
Capacitance (PD)	C_t	$V_{RD} = 5\text{V}, f = 1\text{MHz}$	-	10	20	pF
Minimum Isolation		$T_o = 0 \sim +60^\circ\text{C}$	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	+70	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40	+100	$^\circ\text{C}$
Lead soldering Temperature (10see)	T_L		260	$^\circ\text{C}$

Ordering Information

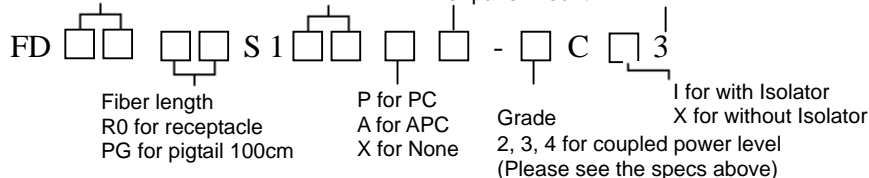
Wavelength

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

Connector type
SC, FC or ST

Flange type
B for board mount
P for panel mount

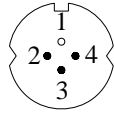
3 for 1.25Gbps



1.25Gbps CWDM Laser Diode Module

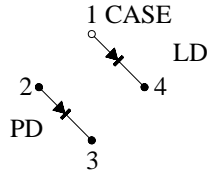
Pin Connections

BOTTOM VIEW

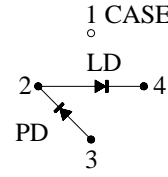


UNIT : MM

C TYPE
PIN CONNECTIONS

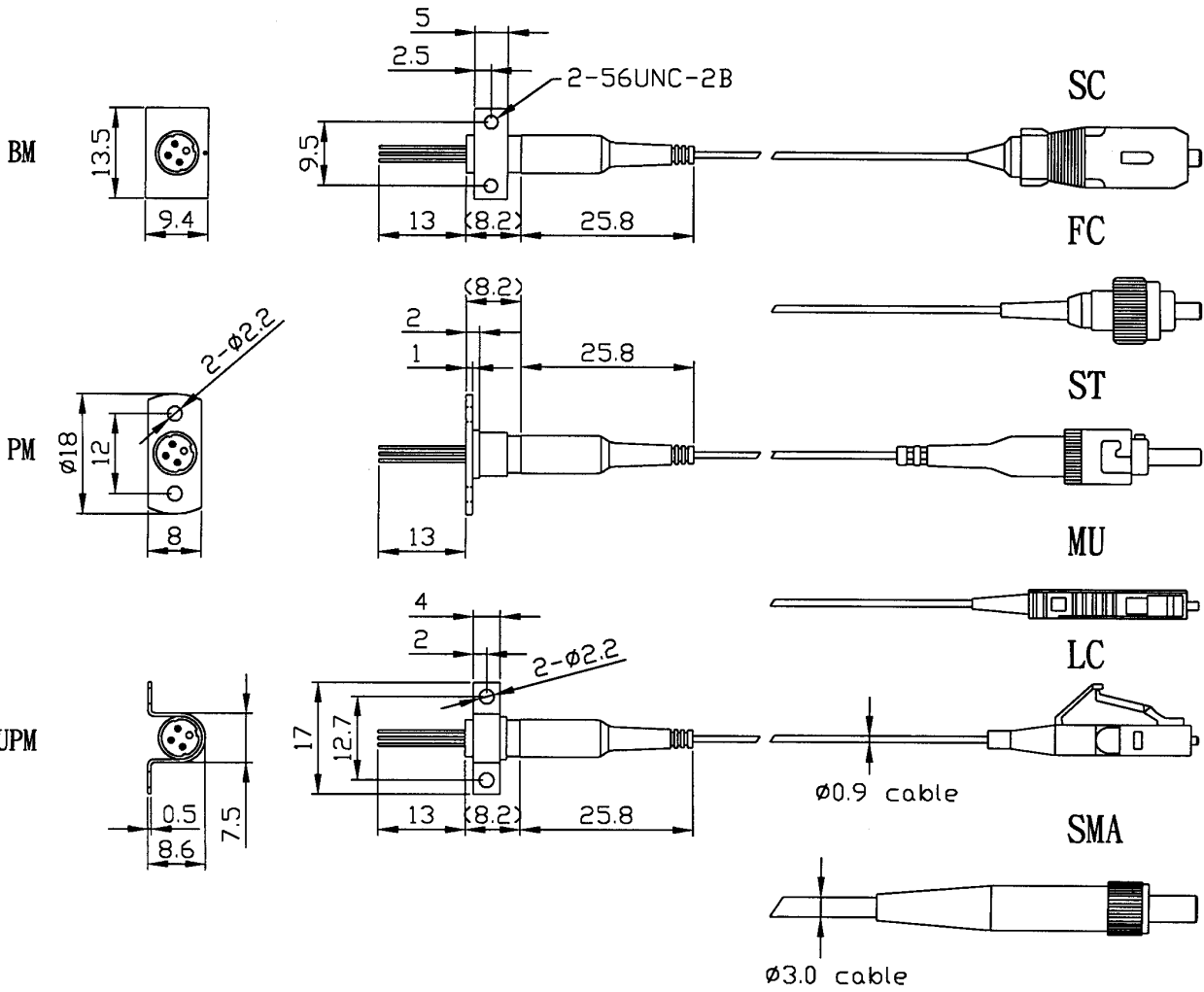


D TYPE
PIN CONNECTIONS



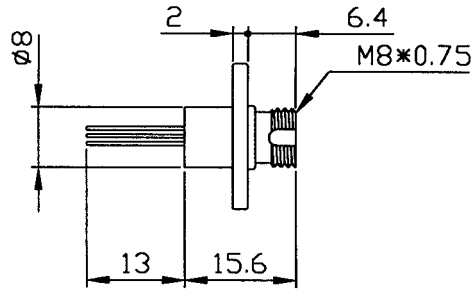
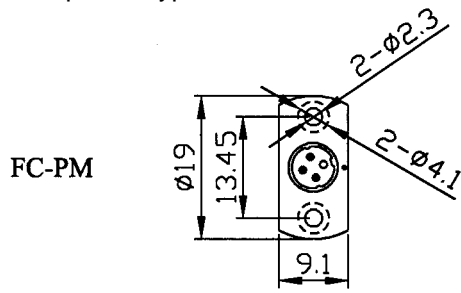
Dimension

Pigtail Type

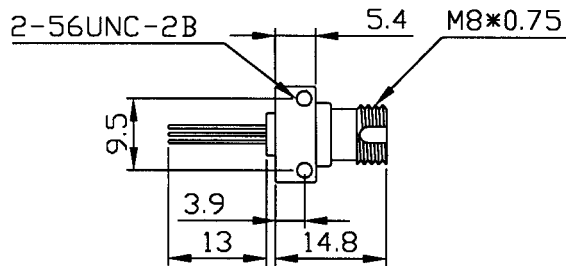
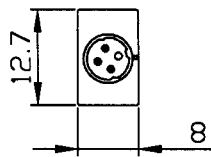


1.25Gbps CWDM Laser Diode Module

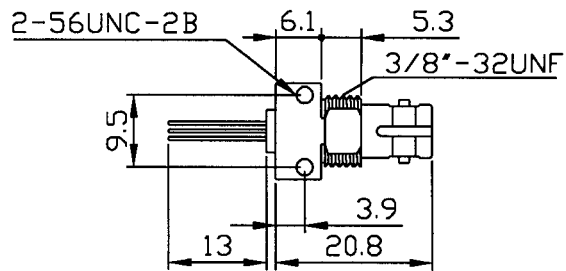
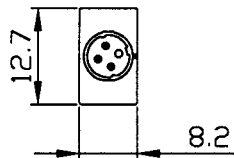
Receptacle Type



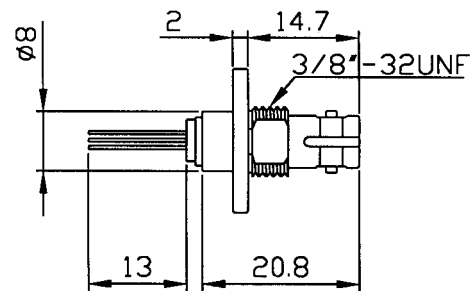
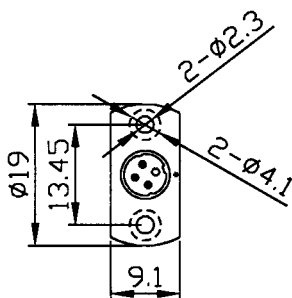
FC-BM



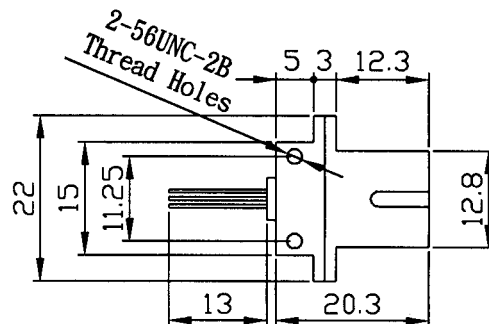
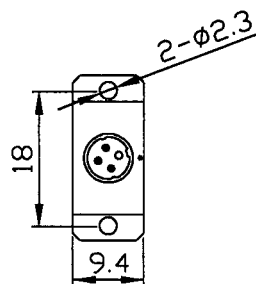
ST-BM



ST-PM



SC

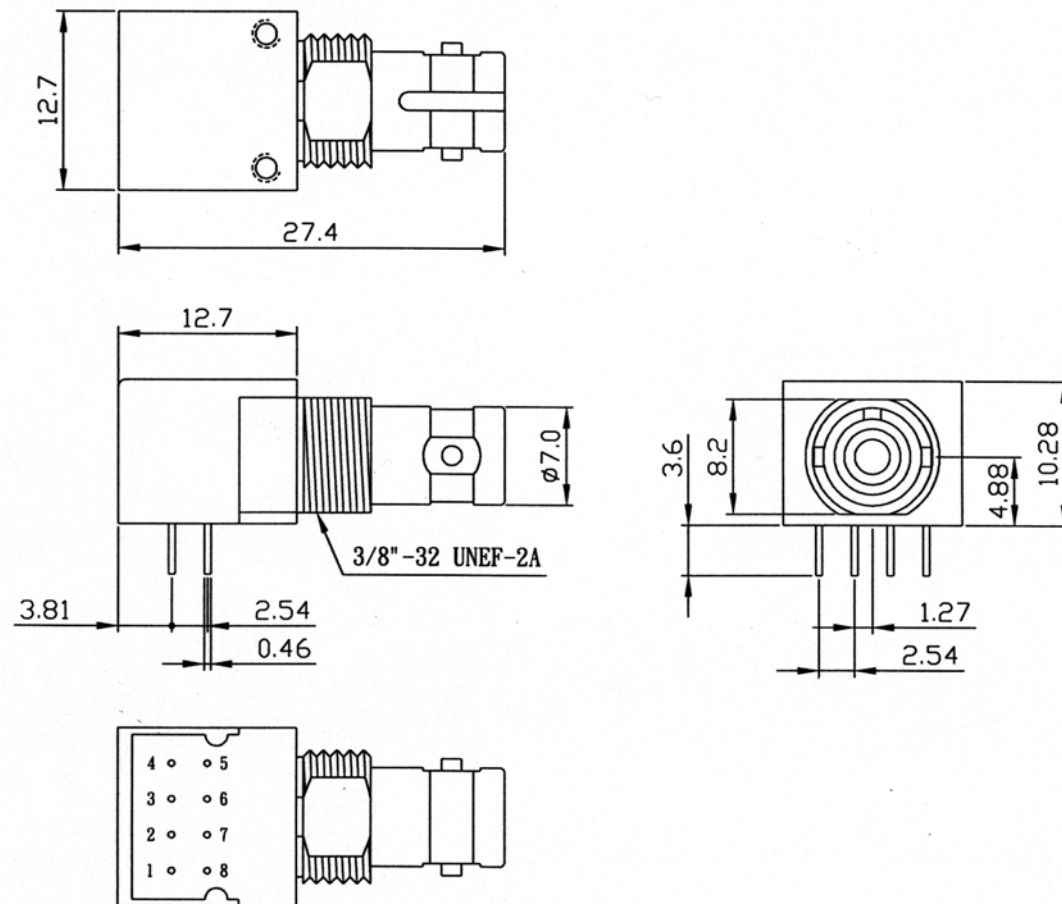


1.25Gbps CWDM Laser Diode Module

1.25Gbps 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