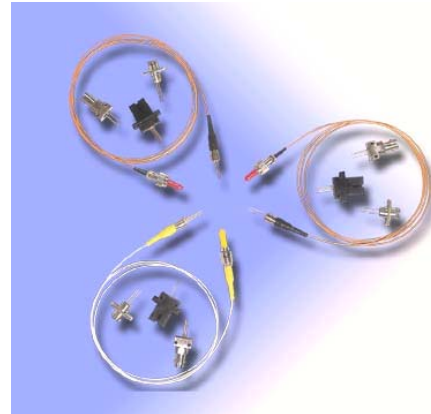


2.5Gbps 1625nm DFB Laser Diode Module

Features

- Center wavelength 1625nm
- Low threshold current
- High speed $t_r/t_f < 0.2\text{ns}$
- Built-in InGaAs monitor detector
- Four-lead package
- Wide operating temperature -20°C to 75°C
- Hermetically sealed TO-18 package in pigtailed or receptacle housing with FC, ST or SC connector



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)

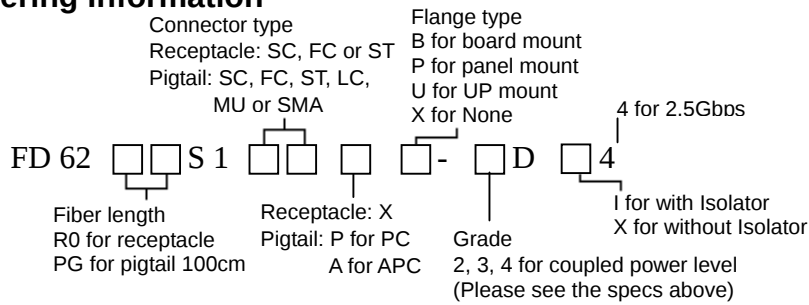
Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Peak Wavelength	λ_c	$P_o, T_o = -20 \sim 75^{\circ}\text{C}$	1622	1625	1628	nm
Spectral Width (-20dB)	$\Delta\lambda$		-	0.1	1	nm
Wavelength Temperature Coefficient	$\Delta\lambda/\Delta T$			0.1	0.14	nm/ $^{\circ}\text{C}$
Threshold Current	I_{th}	$P_o, T_c = 25^{\circ}\text{C}$ $P_o, T_c = 75^{\circ}\text{C}$	- -	12 35	20 55	mA
Operating Voltage	V_{op}	P_o	-	1.1	1.6	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	$P_o, T_o = -20 \sim +75^{\circ}\text{C}$	30	40		dB
Rise/Fall Time	t_r/t_f	1.25Gbps, 10~90%	-	-	0.2	ns
Tracking Error	TE	$P_o, T_o = -20 \sim +75^{\circ}\text{C}$	-1.0	-	1.0	dB
Monitor Current (PD)	I_m	$P_o, V_{RD} = 1\text{V}, R_L = 10\Omega$	15	-	200	$\mu\text{A}/\text{mW}$
Monitor Dark Current (PD)	I_d	$V_{RD} = 5\text{V}$	-	-	200	nA
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
Operating Current (LD)	I_{op}	-	120	mA
Reverse Voltage (LD)	V_{RL}	-	2	V
Reverse Voltage (PD)	V_{RD}	-	10	V
Forward Current (PD)	I_{FD}	-	2	mA
Case Temperature	T_o	-20	+75	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40	+100	$^{\circ}\text{C}$
Lead Soldering Temperature (10sec)	T_L	-	260	$^{\circ}\text{C}$

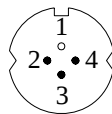
2.5Gbps 1625nm DFB Laser Diode Module

Ordering Information



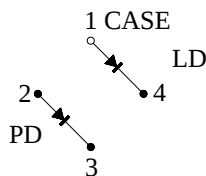
Pin Connections

BOTTOM VIEW

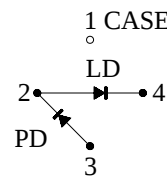


UNIT : MM

C TYPE
PIN CONNECTIONS

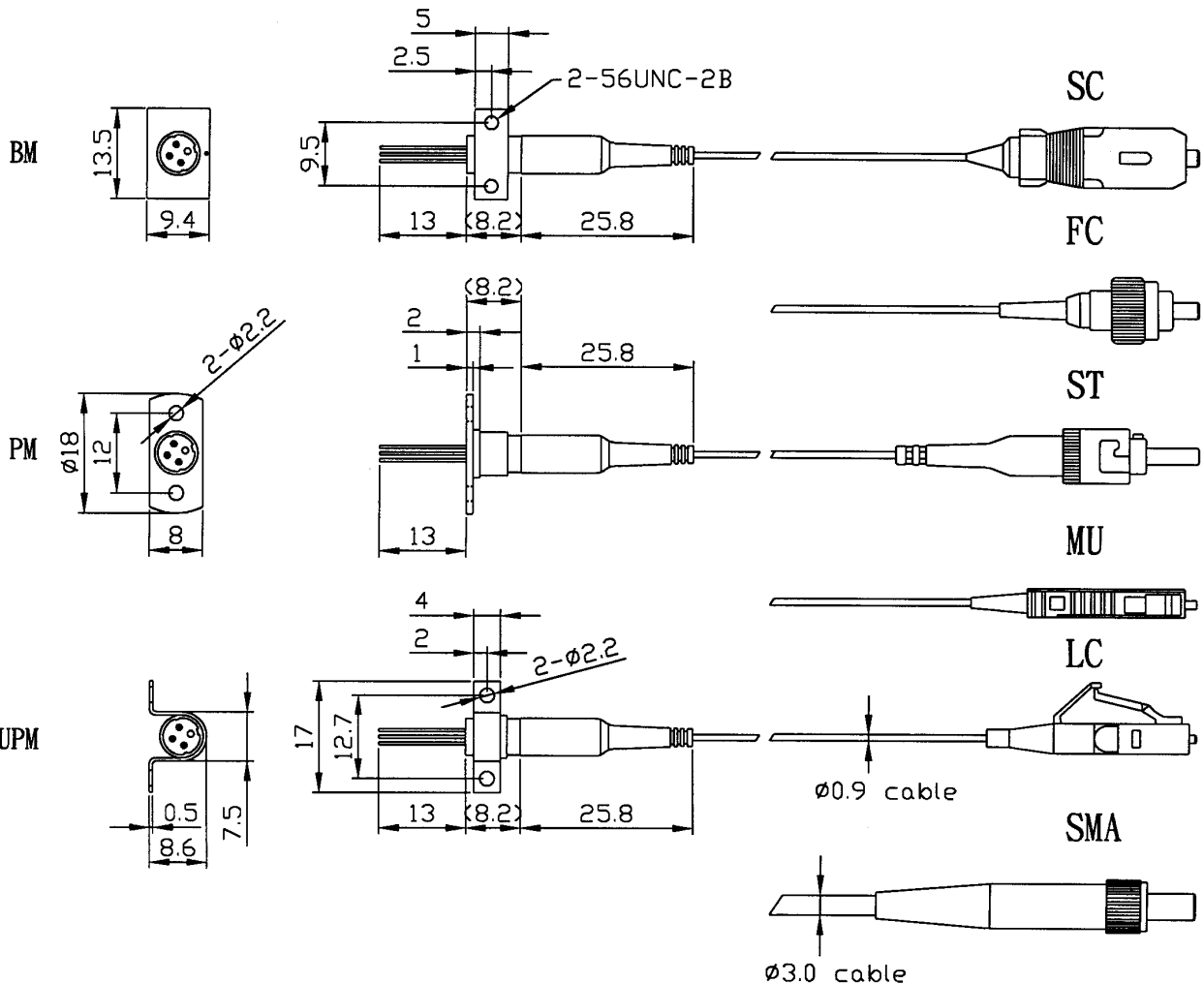


D TYPE
PIN CONNECTIONS



Dimension

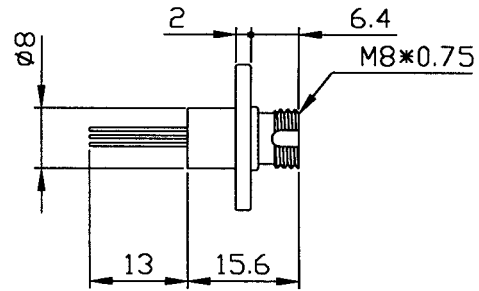
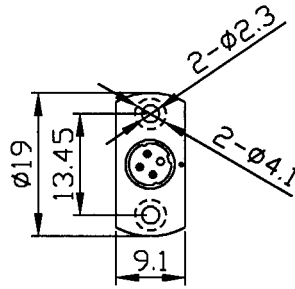
Pigtail Type



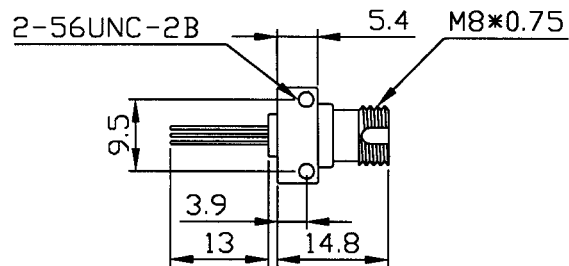
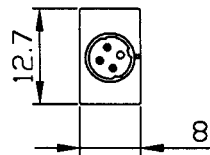
2.5Gbps 1625nm DFB Laser Diode Module

Receptacle Type

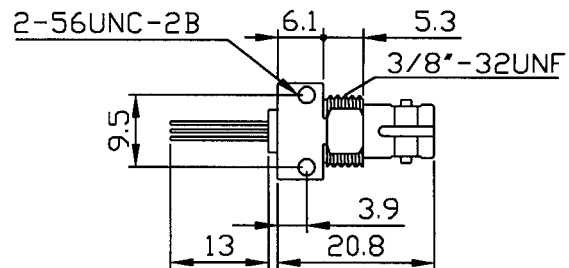
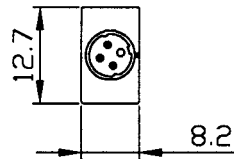
FC-PM



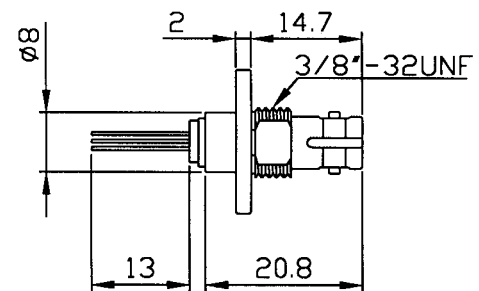
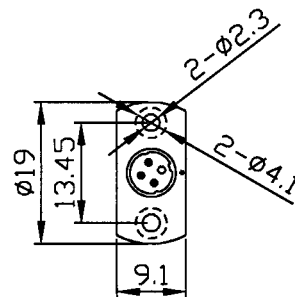
FC-BM



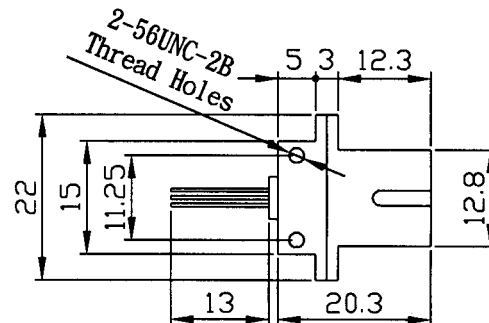
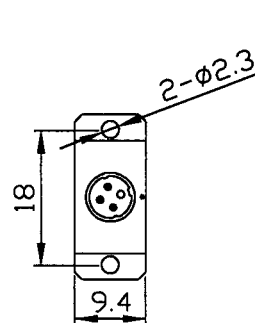
ST-BM



ST-PM



SC

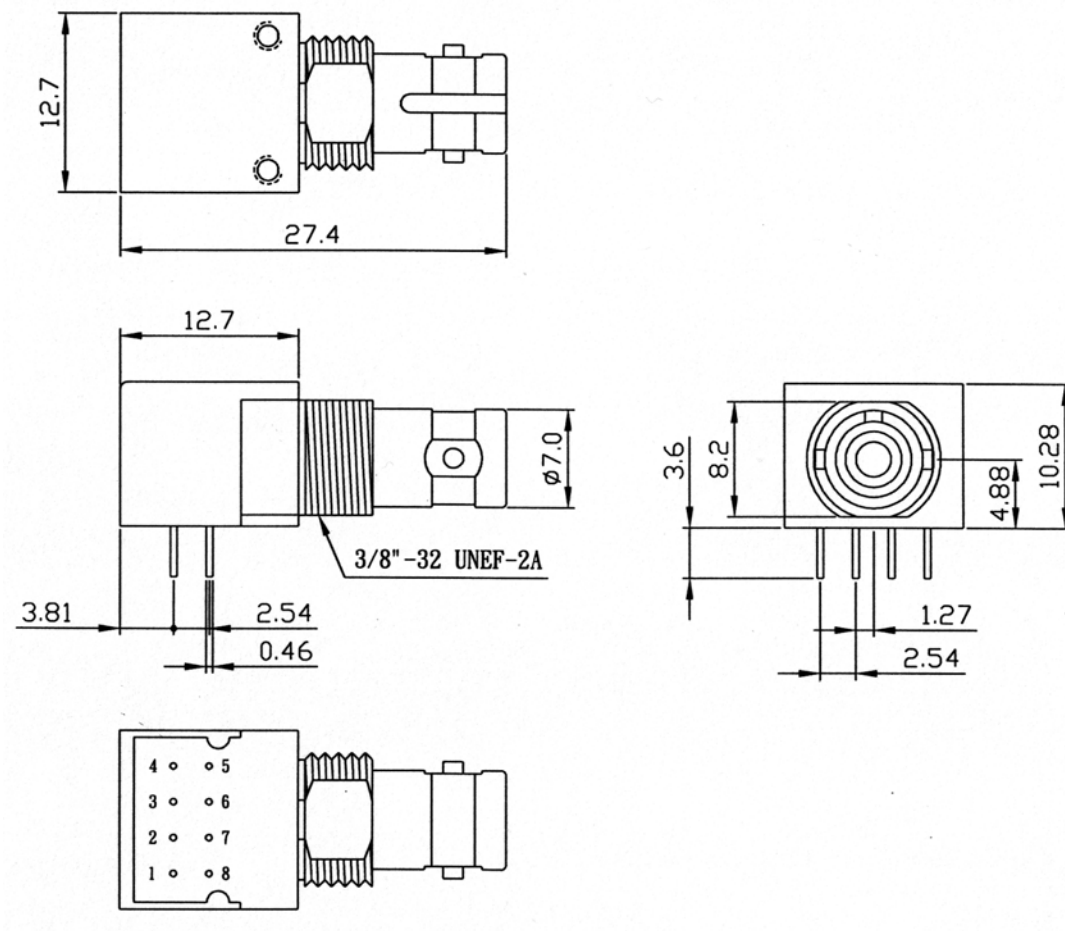


2.5Gbps 1625nm DFB Laser Diode Module

2.5Gbps 1625nm DFB 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