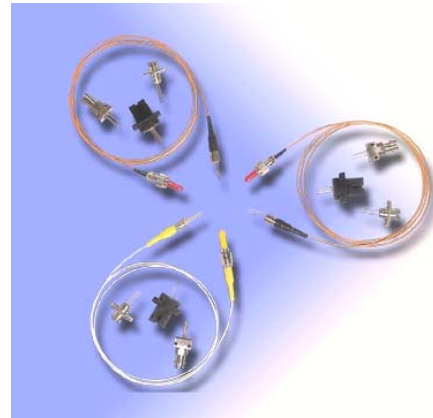


2.5Gbps 1310nm FP Laser Diode SM Module

Features

- Center wavelength 1310nm
- Low threshold current
- High speed $t_r/t_f < 0.12\text{ns}$
- 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



Applications

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

Specifications

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

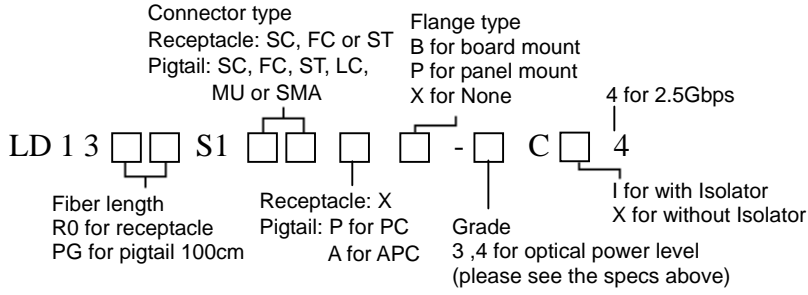
Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Threshold Current	I_{th}	P_o 85°C	-	10	15 30	mA
Operating Voltage	V_{op}	P_o	-	1.1	1.8	V
Peak Wavelength	λ_c	$P_o, -20\sim 85^\circ\text{C}$	1290	1310	1330	nm
Spectral Width				1	3	nm
Optical Output Power	P_o	$I_{th}+20\text{mA}$				
-3			1	-	-	mW
-4			1.4	-	-	mW
Differential Efficiency		P_o				
-3			0.1	-	-	W/A
-4			0.14	-	-	W/A
Rise/Fall Time	tr/tf	2.5Gbps, 20~80%	-	80	120	ps
Tracking Error	TE	$-20\sim +85^\circ\text{C}$		± 1.0		dB
Monitor Current (PD)	I_m	$P_o, V_{RD}=1\text{V}$	0.1	0.5	-	mA
Dark Current (PD)	I_d	$V_{RD}=5\text{V}$	-	-	0.1	μA
Capacitance (PD)	C_t	$V_{RD}=5\text{V}, f=1\text{MHz}$	-	10	20	pF
Return Loss			40	-	-	dB
Minimum Isolation (w/isolator)		$T_o= 0\sim +60^\circ\text{C}$	30	-	-	dB

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Forward Current (LD)	I_{op}	-	85	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 (10see)	T_L	-	260	$^\circ\text{C}$

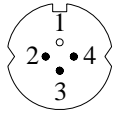
2.5Gbps 1310nm FP Laser Diode SM Module

Ordering Information



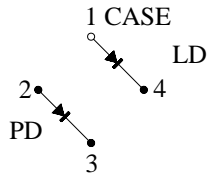
Pin Connections

BOTTOM VIEW

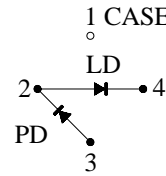


UNIT : MM

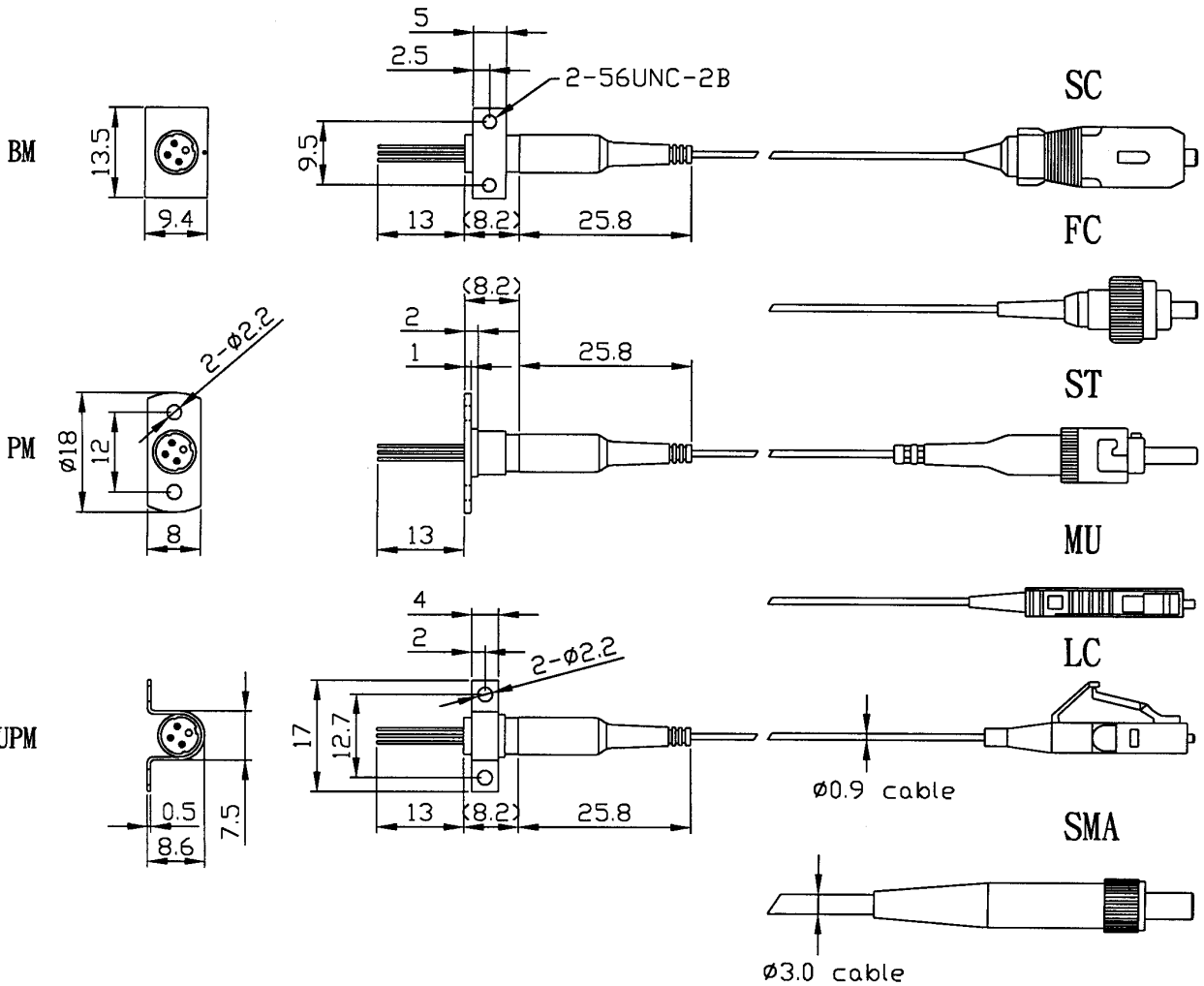
C TYPE PIN CONNECTIONS



D TYPE PIN CONNECTIONS

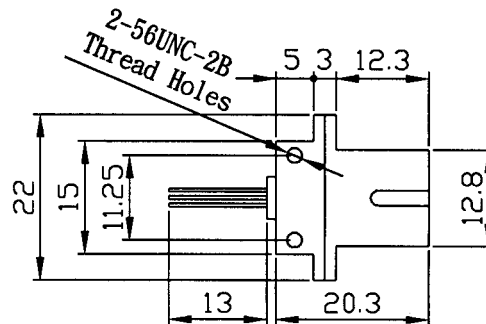
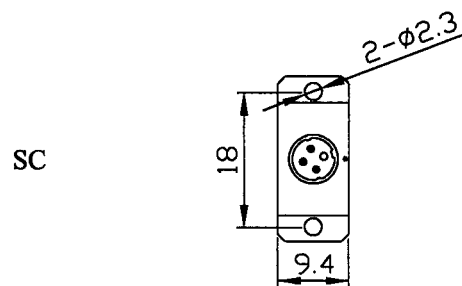
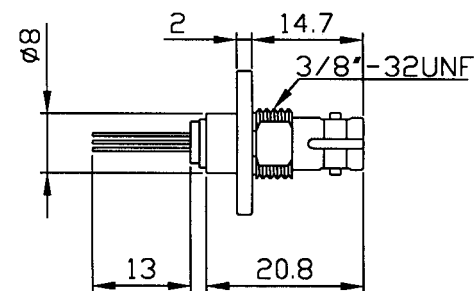
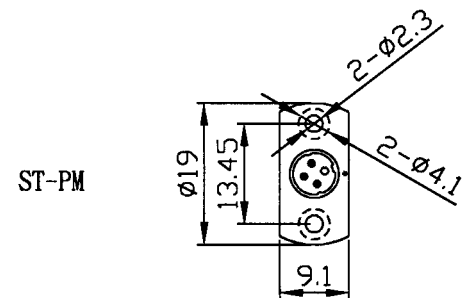
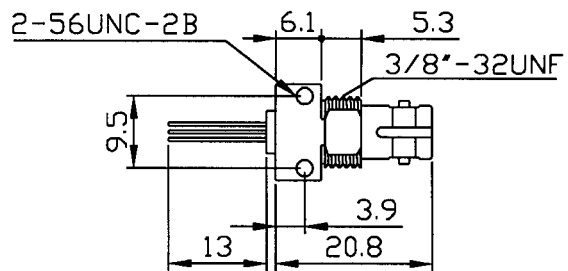
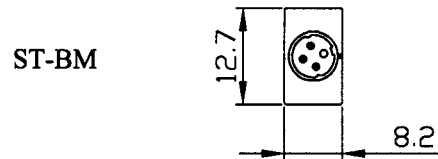
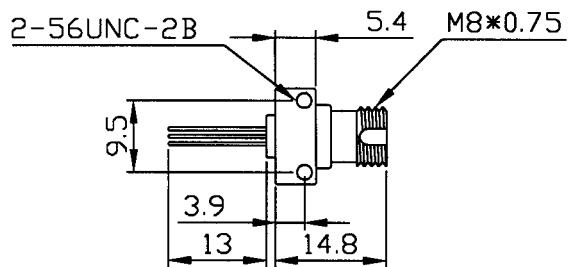
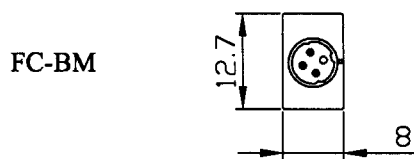
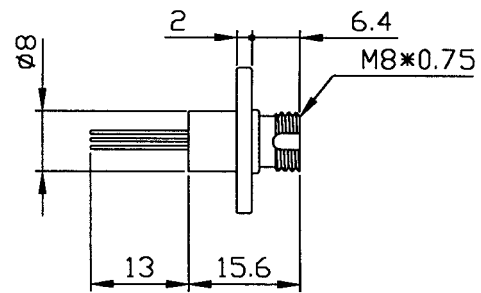
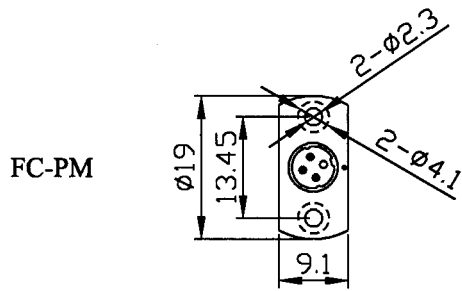


Dimension Pigtail Type



2.5Gbps 1310nm FP Laser Diode SM Module

Receptacle Type

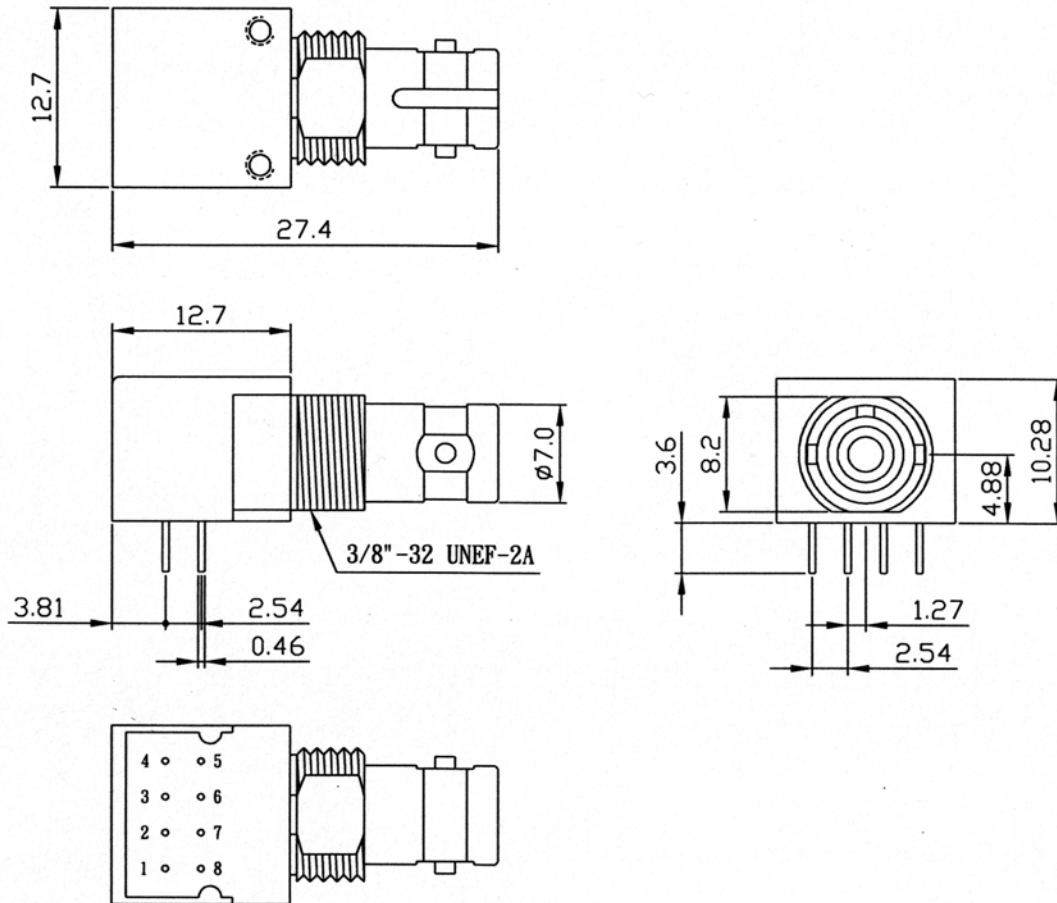


2.5Gbps 1310nm FP Laser Diode SM Module

2.5Gbps 1310nm FP Laser Diode SM 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

2.5Gbps 1310nm FP Laser Diode SM Module

1310nm FP LD
Fiber-coupled Power vs. Drive Current

