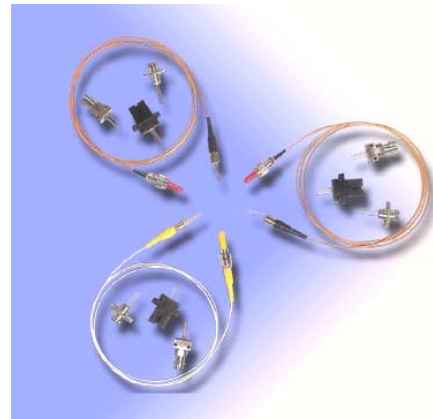


850nm VCSEL SM Module

Features

- High coupled power
- Peak wavelength 850nm
- Low threshold current 3mA
- High speed $t_r, t_f < 0.3\text{ns}$
- Operating temperature range 0°C to 70°C
- Hermetically sealed To -46 package in pigtailed or receptacle housing with FC, ST or SC connector



850nm VCSEL SM Module

Applications

- Gigabit Ethernet

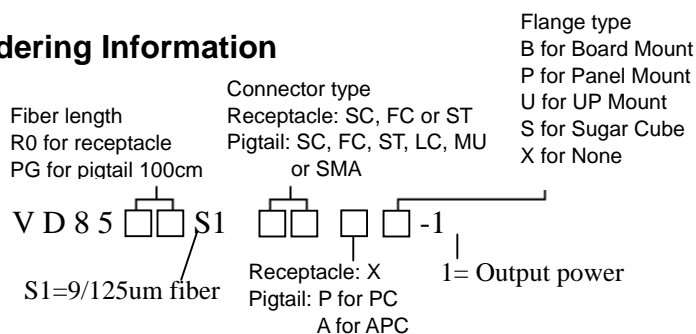
Specifications (T=25 °C)

Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Peak wavelength	λ	$I_{op}=12\text{mA}$	830	850	860	nm
Spectral width FWHN	$\Delta\lambda$	P_0	-	-	0.85	nm
Threshold current	I_{th}	-	-	3	6	mA
Threshold current temperature variation (0 to 70°C)	-	-	-1	-	1	mA
Coupled power (9/125 μm fiber)	P_0	12mA, 25-C				
-1			50	-	-	μW
-2			150	200	-	μW
Slope efficiency	SE	P_0	-	0.25	-	mW/mA
Slope efficiency temperature dependence	SE	P_0	-	-0.15	-	%/ $^\circ\text{C}$
Monitor Current (PD)	I_m	P_0	0.03	0.1	-	mA
Forward voltage	V_f	P_0	1.7	1.9	2.2	V
Series Resistance	R_s	P_0	-	30	-	Ω
Tracking Error	E_t	-40 to 85°C	-	± 1.0	-	dB

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Continuous forward current (LD)	I_{op}	-	15	mA
Continuous reverse voltage (LD)	V_{RL}	-	10	V
Operating temperature	T_o	0	85	$^\circ\text{C}$
Storage temperature	T_{stg}	-40	100	$^\circ\text{C}$
Lead soldering temperature (10 sec)	T_L	-	260	$^\circ\text{C}$

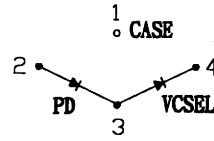
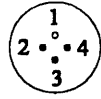
Ordering Information



850nm VCSEL SM Module

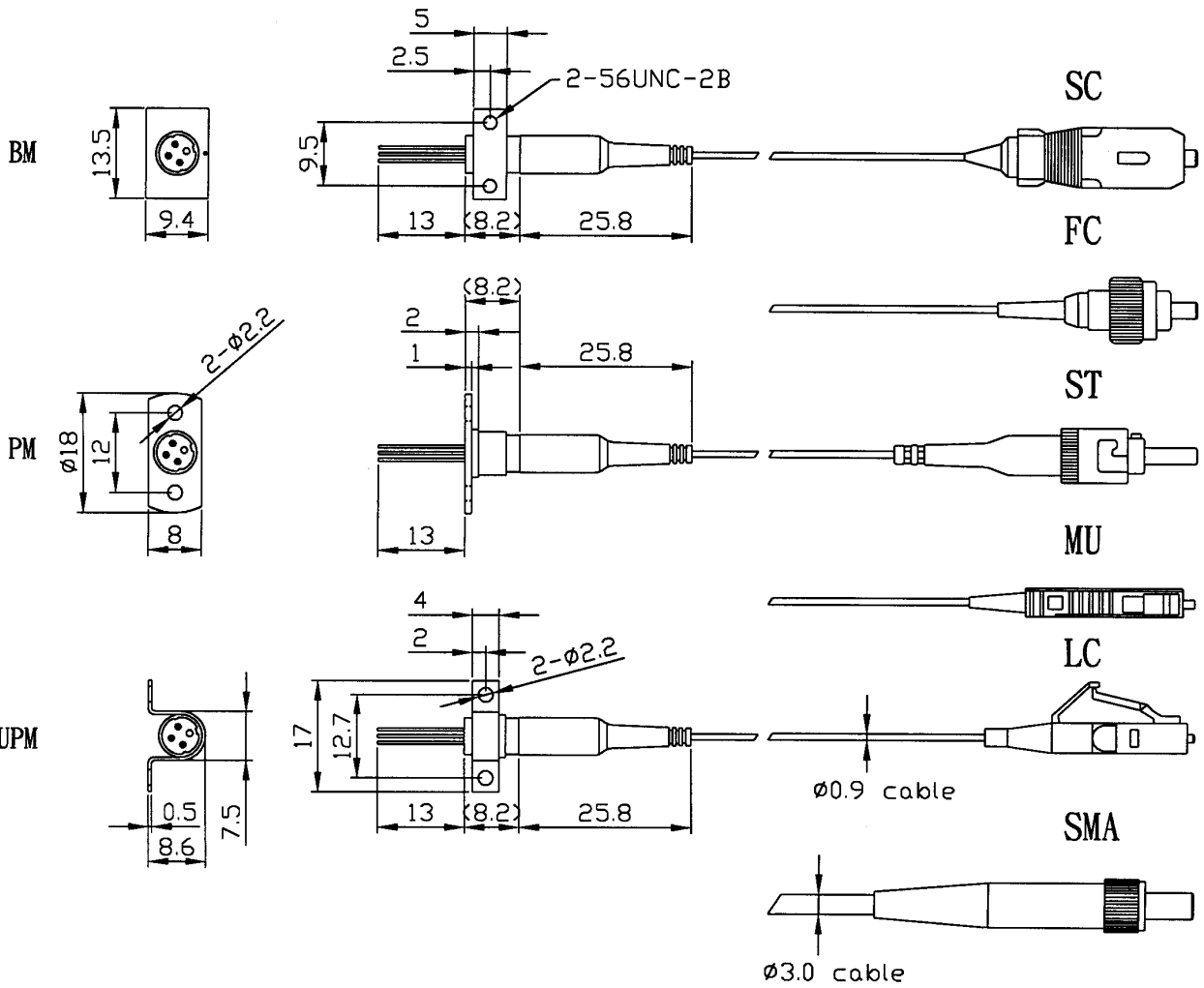
Pin Connections

BOTTOM VIEW



Dimension

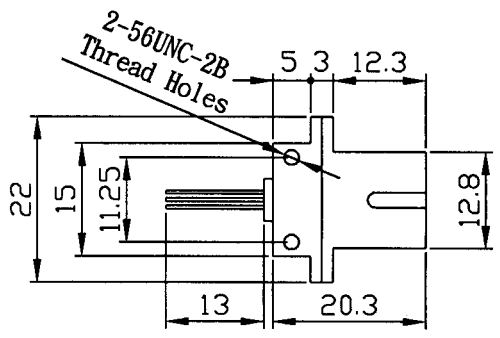
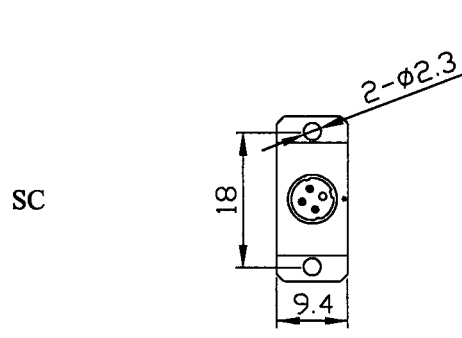
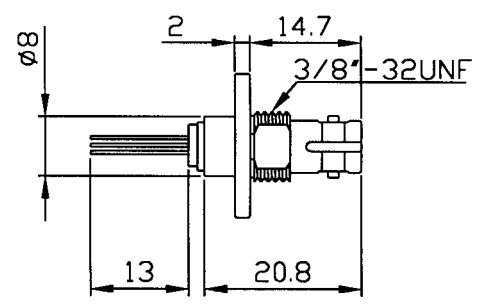
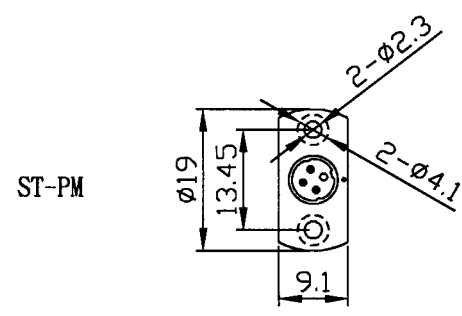
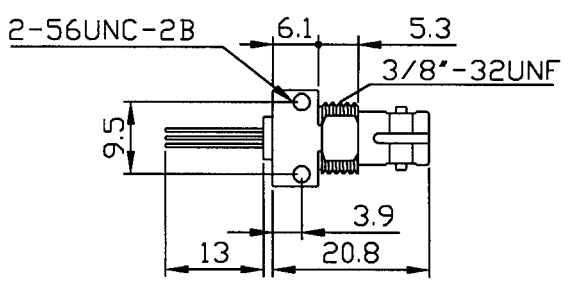
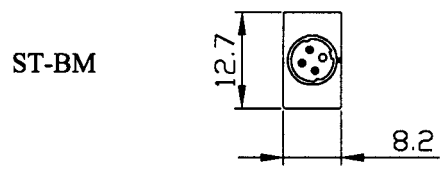
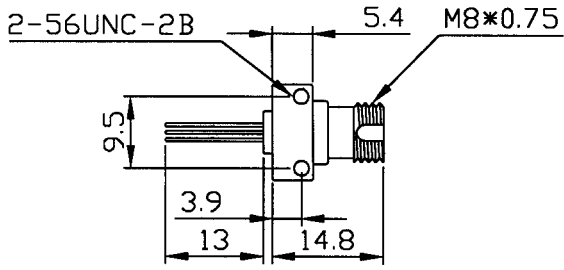
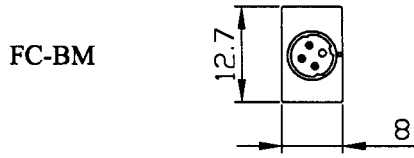
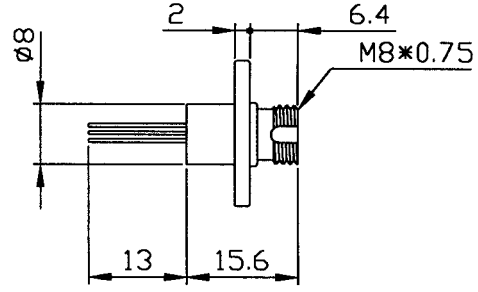
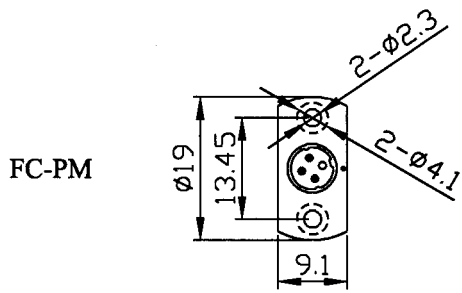
Pigtail Type



850nm VCSEL SM Module

Receptacle Type

850nm VCSEL SM Module

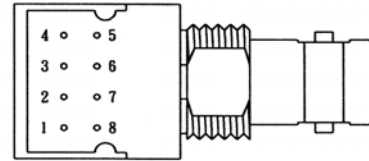
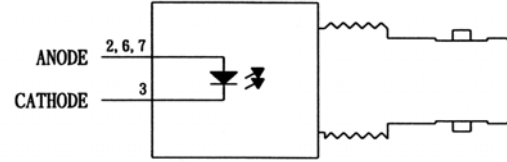


850nm VCSEL SM Module

Sugar Cube

Pin Connections (Type B)

PIN No.	FUNCTION
1	NC
2	Anode
3	Cathode
4	NC
5	NC
6	Anode
7	Anode
8	NC



BOTTOM VIEW

Dimension (ST Receptacle) Unit mm

