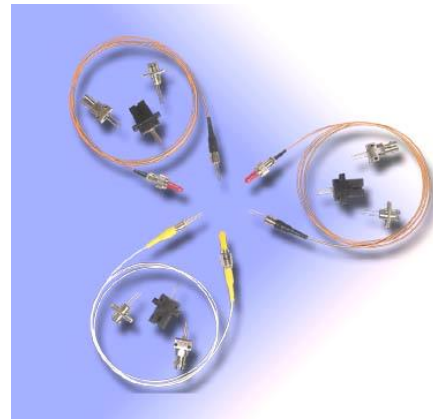


850nm VCSEL SM Module

Features

- High coupled power
- Peak wavelength 850nm
- Low threshold current 2mA
- 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}	-	-	2	5	mA
Threshold current temperature variation (0 to 70°C)	-	-	-1.5	-	1.5	mA
Coupled power (9/125 μm fiber)	P_0					
-1		12mA, 25°C	50	-	-	μW
-2		20mA, 25°C	150	-	-	μW
Slope efficiency temperature dependence	SE	P_0	-0.6	-	-	$\%/\text{C}$
Monitor Current (PD)	I_m	P_0	50	-	-	μA
PD Capacitance	C_{PD}	$V_R=3\text{V}$ @ 1MHz	-	6	10	pF
Forward voltage	V_f	P_0	1.7	1.9	2.2	V
Series Resistance	R_s	P_0	30	-	60	Ω

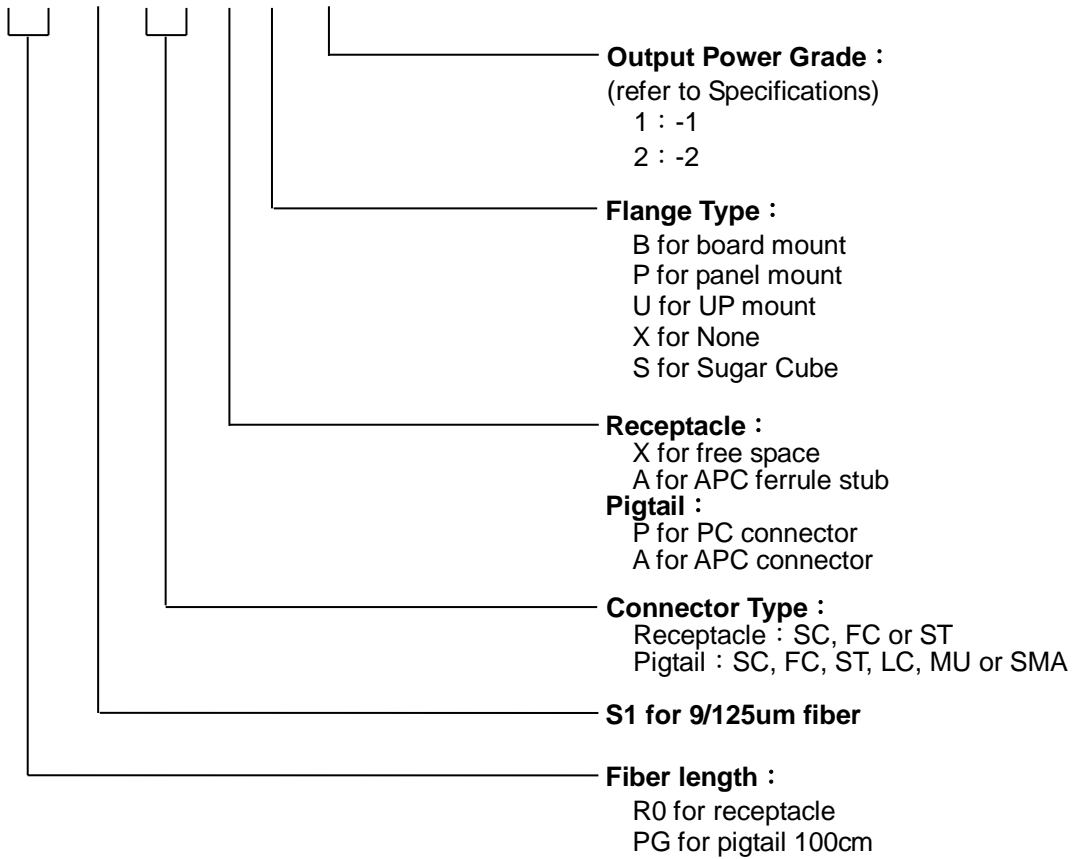
Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Continuous forward current (LD)	I_{op}	-	15 (-1 level)	mA
			22 (-2 level)	mA
Continuous reverse voltage (LD)	V_{RL}	-	5	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	$^\circ\text{C}$

850nm VCSEL SM Module

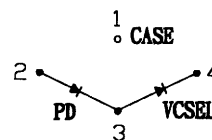
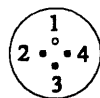
Ordering Information

VD85□□S1□□□□-□



Pin Connections

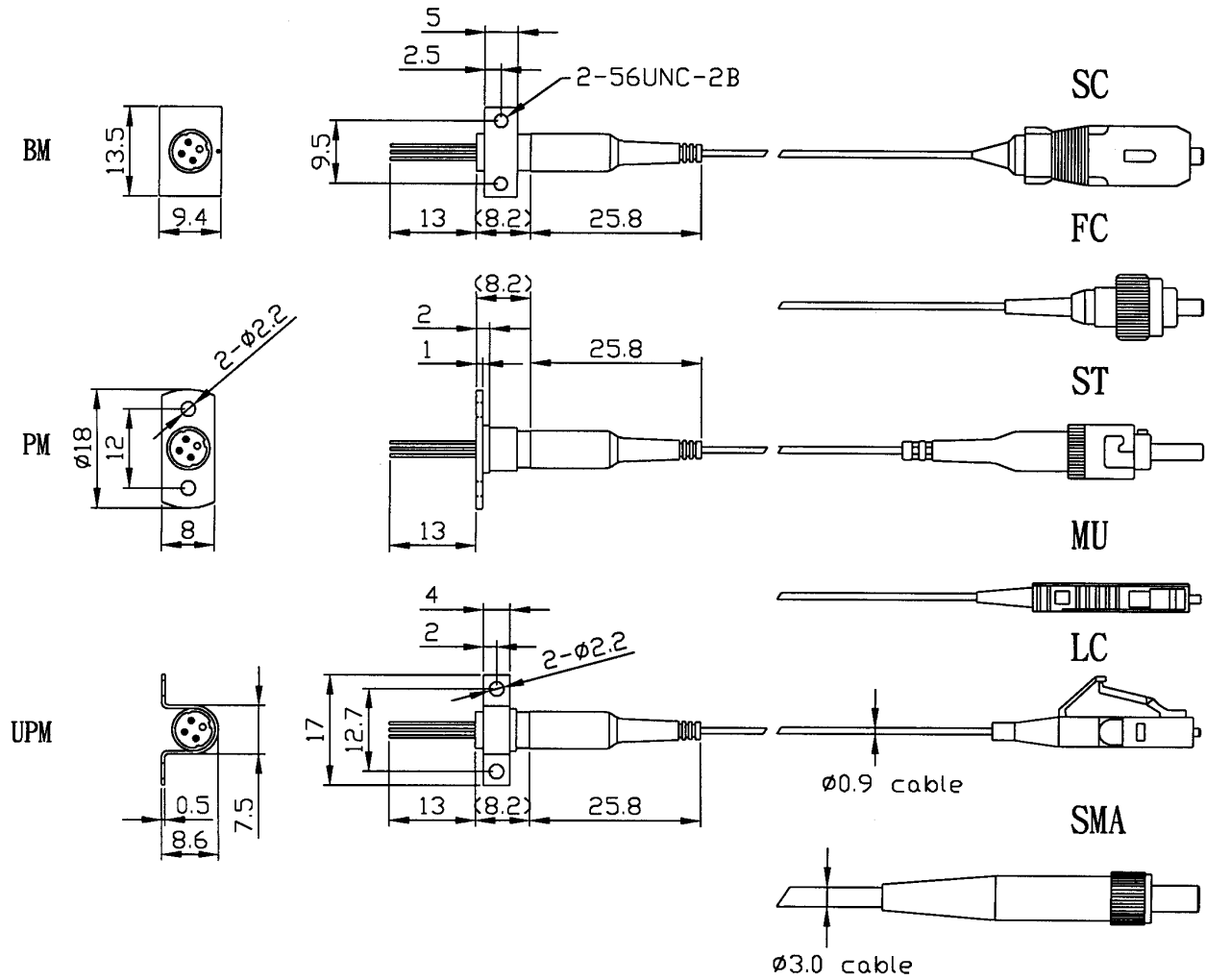
BOTTOM VIEW



850nm VCSEL SM Module

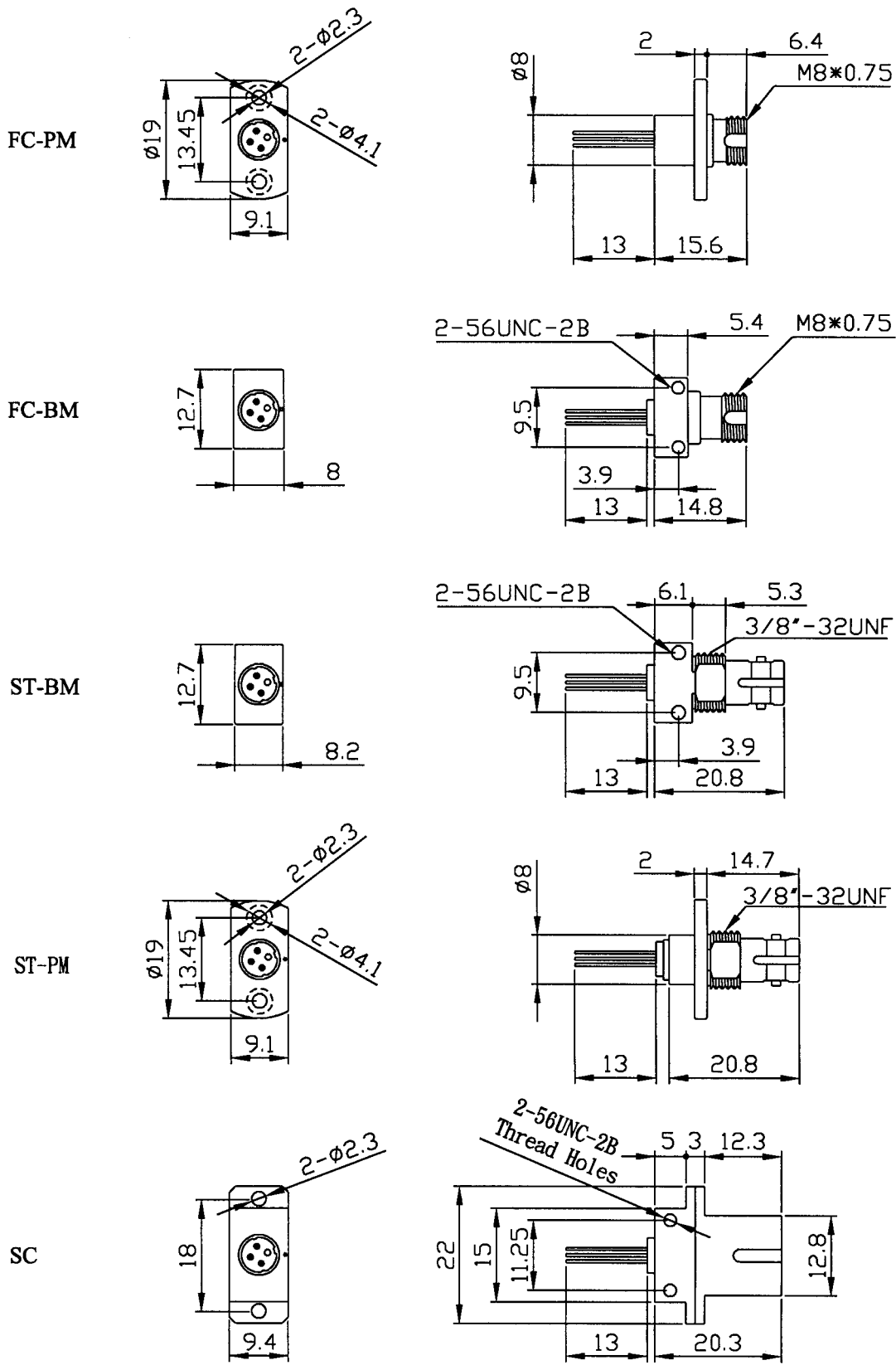
Dimension

Pigtail Type



850nm VCSEL SM Module

Receptacle Type

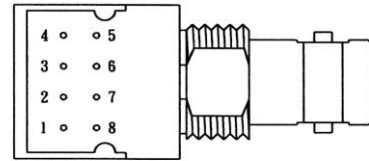
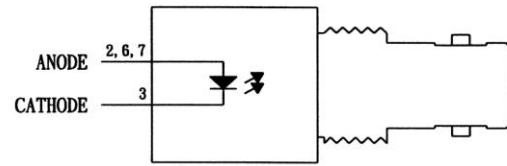


850nm VCSEL SM Module

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

