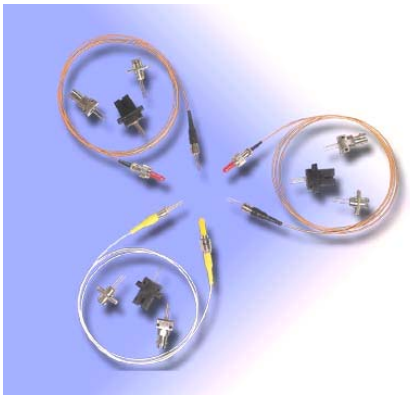
850nm LED Module

850nm LED Module

Features

- High coupled power
- Peak wavelength 850 nm
- High reliability
- Data rate up to 200 Mb/s
- Operating temperature range -40°C to 85°C
- Hermetically sealed To-46 package in pigtailed or receptacle housing with FC, ST or SC connector



Specifications (100mA forward current, 25°C)

Parameter	Symbol	Min	Typical	Max	Units
Peak Wavelength	λ	820	850	870	nm
Spectral Width FWHM	Δλ	-	60	-	nm
Coupled Power (62.5/125 µm fiber)					
-1	Po	20	25	40	µW
-2	Po	40	55	70	µW
-3	Po	100	125	150	µW
-4	Po	150	200	-	µW
Coupled Power (50/125 µm fiber)					
-1	Po	10	13	20	µW
-2	Po	20	27	35	µW
-3	Po	50	60	75	µW
-4	Po	75	100	-	µW
Coupled Power (100/140 µm fiber) -4	Po	300	400	-	µW
Coupled Power (200/230 µm fiber) -4	Po	500	700	-	µW
Forward Voltage	V_F	-	1.8	2.2	V
Rise/Fall Time -1 & -2	tr/tf	-	-	7	ns
-3 & -4	tr/tf		-	4	ns
Bandwidth -1 & -2	fc	-	60	-	MHz
-3 & -4	fc		175		MHz
Data Rate -1 & -2	B	-	155	-	Mb/s
-3 & -4	B	-	230	-	Mb/s

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Operating Temperature	To	-40	+85	°C
Storage Temperature	T_{stg}	-55	+125	°C
Reverse Voltage	V_R	-	1.5	V
Continuous Forward Current	Ico	-	120	mA
Peak Forward Current (duty cycle < 50%, f>1MHz)	Ipo	-	150	mA
Lead Soldering Temperature (10 sec)	T_L	-	260	°C

Ordering Information

Fiber length
R0 for receptacle
PG for pigtail 100cm

Connector type
Receptacle: SC, FC or ST
Pigtail: SC, FC, ST, LC, MU or SMA

Flange type
B for Board Mount
P for Panel Mount
U for UP Mount
X for None, S for Sugar Cube

SNS-S D 8 5 □□ M □ □□ □ □ - □

Fiber size
1 for 50/125um
2 for 62.5/125um

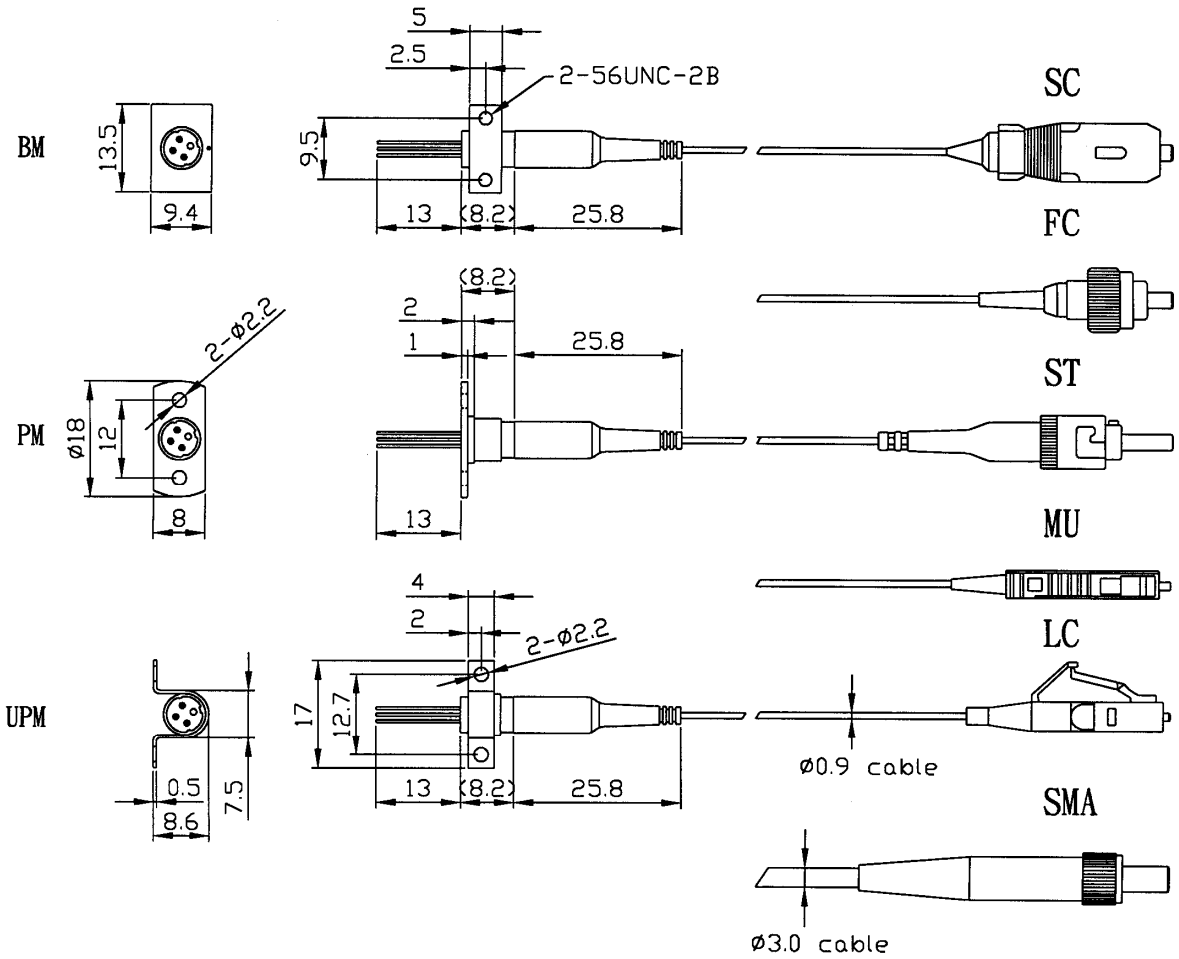
Receptacle: X
Pigtail: P for PC
A for APC

Grade 1
1, 2, 3, 4 for coupled power level
(Please see the specs above)

2009-03

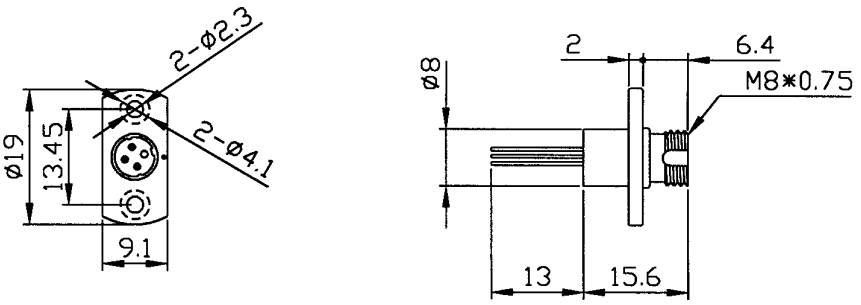
Pin Connections

Dimension

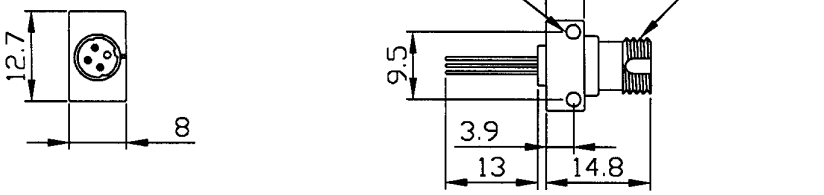


Receptacle Type

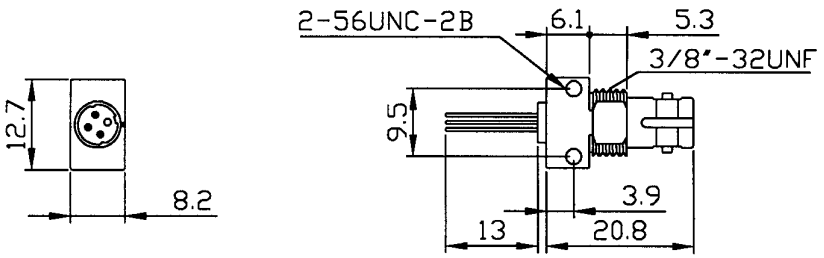
FC-PM



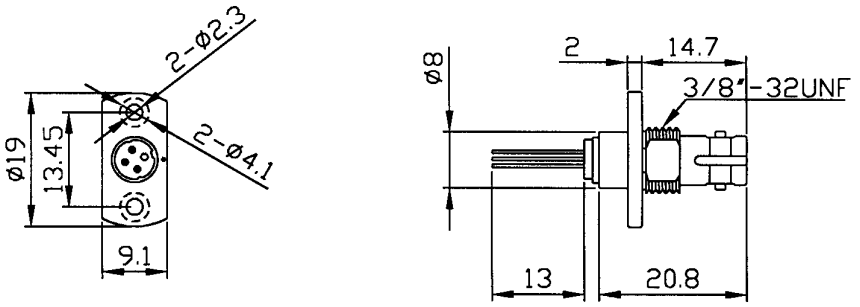
FC-BM



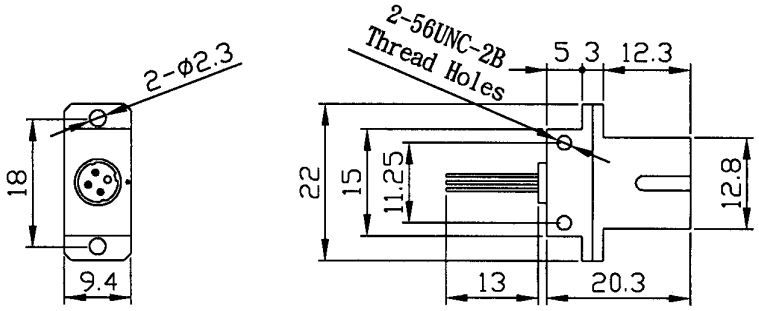
ST-BM



ST-PM



SC

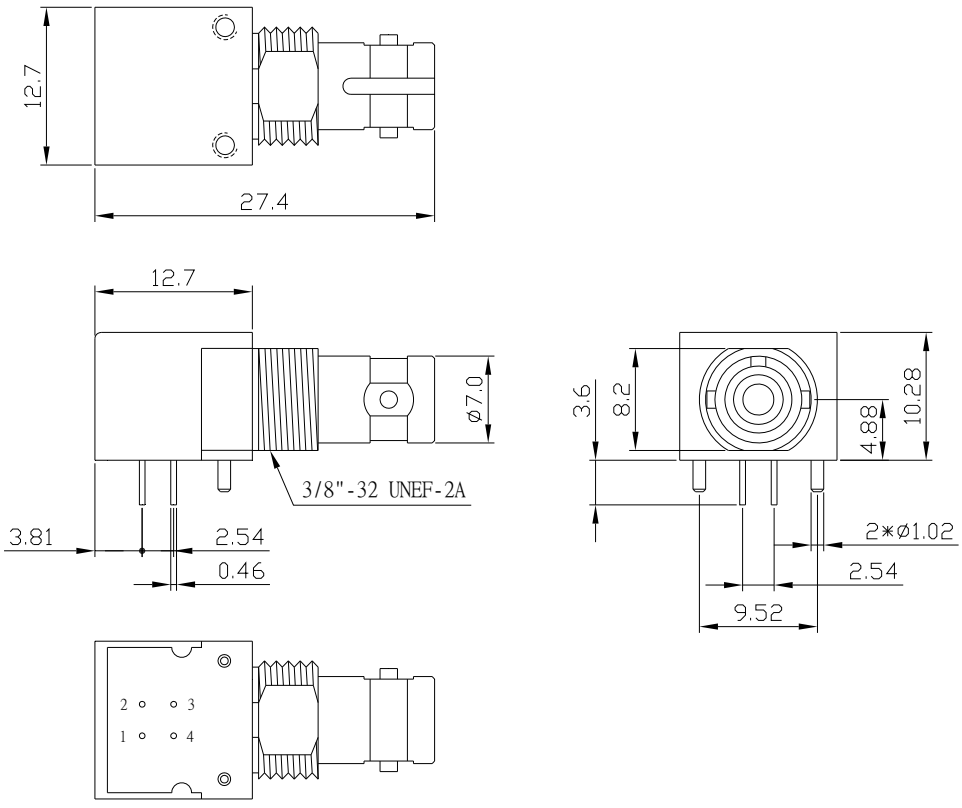


Sugar Cube

Pin Connections

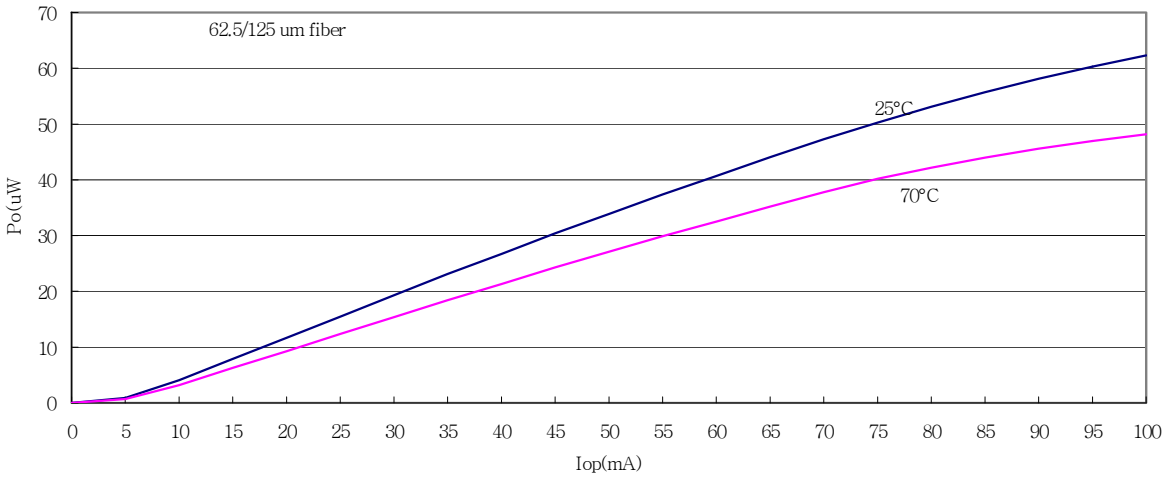
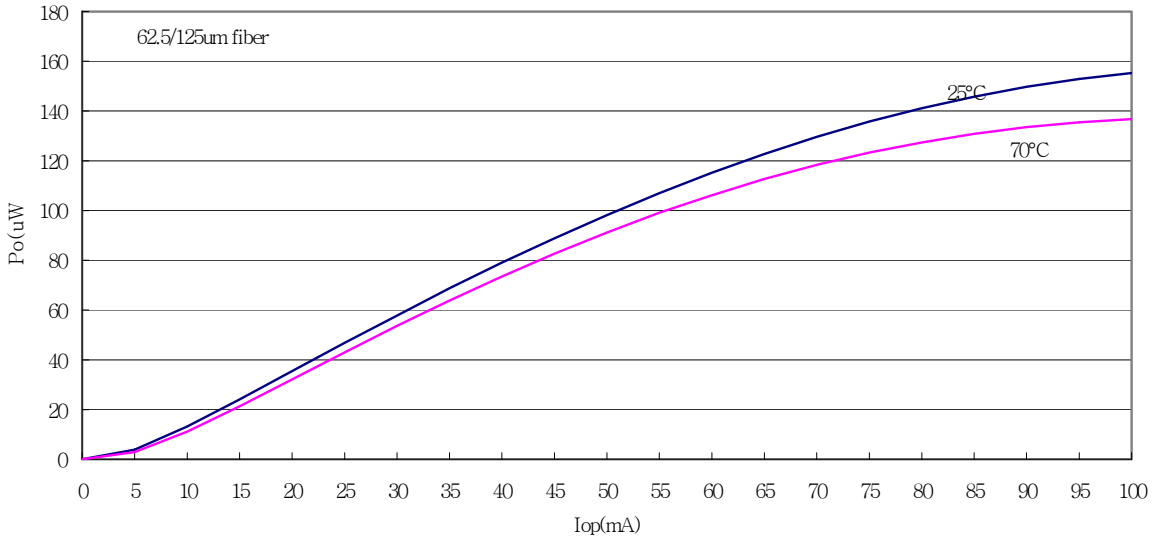
PIN	FUNCTION
1	ANODE
2	CATHODE
3	ANODE
4	ANODE

Dimension (ST Receptacle) Unit mm



Units:mm

850nm LED (-2 Grade)
Po vs Iop



850nm LED (-4 Grade)
Iop-Po Curve