



### Features

- 1300nm or 1550nm Wavelength
- For Single-mode & Multi-mode Application
- High Optical Power
- Low Operating Current
- High Speed
- Low Modal Noise
- 8 Pin Package with SC
- High Operating Temperature
- Pigtail type Sugar Cube
- For Datacom or Measurement Application
- RoHS Compliant available

### Absolute Maximum Ratings (Tc=25 )

Parameter	Symbol	Condition	Rating	Unit
Reverse Voltage	$V_r$	CW	2.5	V
Operating Current	$I_{op}$	CW	150	mA
Operating Temperature	$T_{opr}$	-	-20 ~ 70	
Storage Temperature	$T_{stg}$	-	-40 ~ 85	

(All optical data refer to a coupled 9/125  $\mu\text{m}$  SM & 50/125  $\mu\text{m}$  MM fiber)

### Optical and Electrical Characteristics 1300nm (Tc=25 )

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength		1260	1300	1340	nm	CW
Spectral Width		30	-	80	nm	CW
Operating Current	$I_{op}$	-	80	100	mA	CW
Output Power (SM, 9/125 $\mu\text{m}$ )						
L	$P_f$	10	-	40	$\mu\text{W}$	CW at $I_{op}=80\text{mA}$
M		30	-	60		
H		50	-	80		
Output Power (MM, 50/125 $\mu\text{m}$ )						
L	$P_f$	30	-	-	$\mu\text{W}$	CW at $I_{op}=80\text{mA}$
M		50	-	-		
H		70	-	-		
Forward Voltage	$V_f$	-	1.2	2	V	CW
Rise Time	$T_r$	-	1.5	-	ns	-
Fall Time	$T_f$	-	2.5	-	ns	-
Output Power Variation		-	4	-	dB	25 to 70 , $I_{op}=30\text{mA}$

**(All optical data refer to a coupled 9/125  $\mu\text{m}$  SM & 50/125  $\mu\text{m}$  MM fiber)**  
**Optical and Electrical Characteristics 1550nm (Tc=25 )**

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength		1510	1550	1590	nm	CW
Spectral Width (RMS)		45	-	80	nm	CW
Operating Current	$I_{op}$	-	80	100	mA	CW
Output Power (SM, 9/125 $\mu\text{m}$ )						
L	$P_f$	10	-	-	$\mu\text{W}$	CW at $I_{op}=80\text{mA}$
M		20	-	-		
H		30	-	-		
Output Power (MM, 50/125 $\mu\text{m}$ )						
L	$P_f$	20	-	-	$\mu\text{W}$	CW at $I_{op}=80\text{mA}$
M		30	-	-		
H		40	-	-		
Forward Voltage	$V_f$	-	1.2	2	V	CW
Rise Time	$T_r$	-	1.5	-	ns	-
Fall Time	$T_f$	-	2.5	-	ns	-
Output Power Variation		-	4	-	dB	25 to 70 , $I_{op}=30\text{mA}$

### LD Pin Assignment

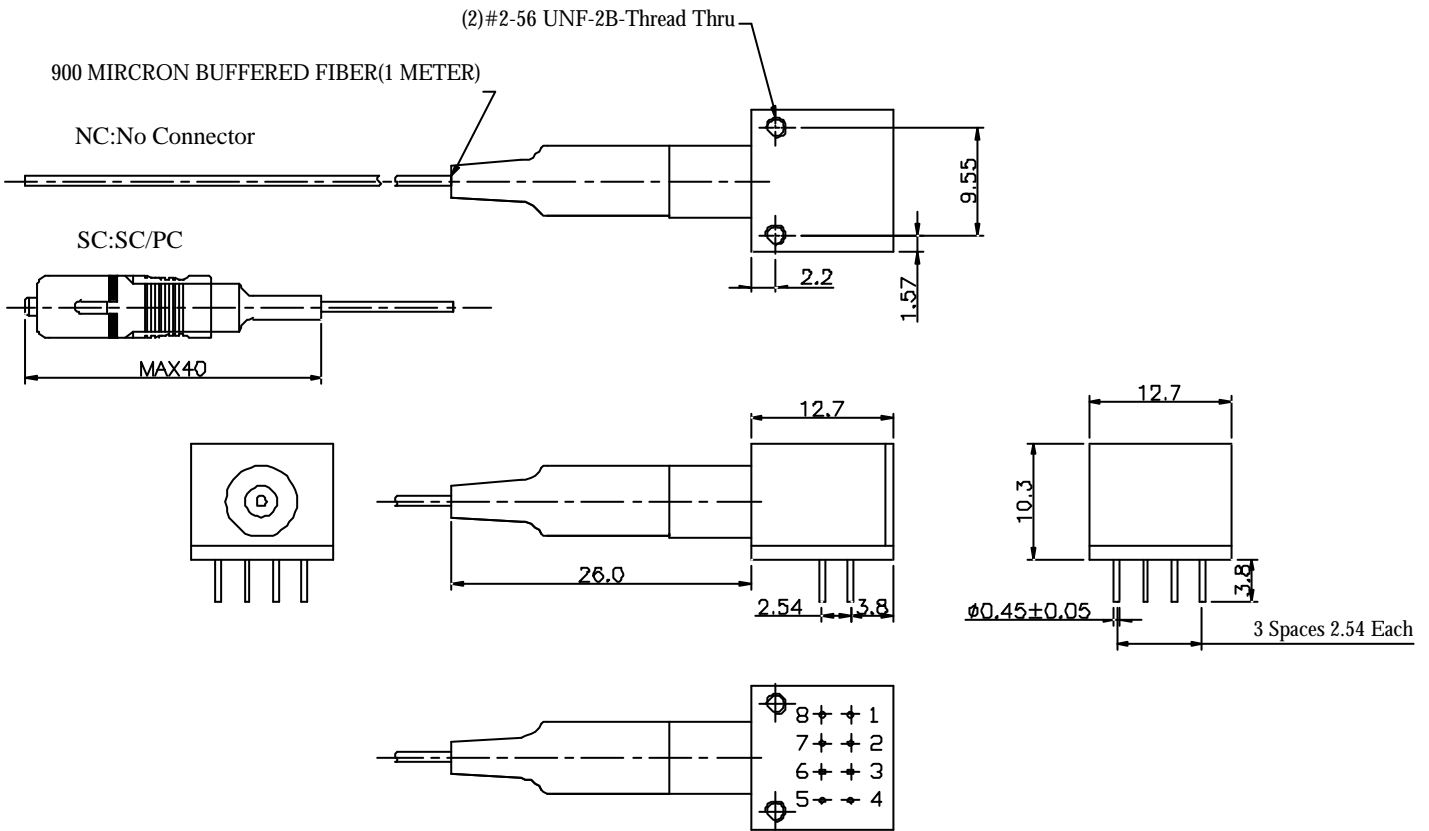
1: Option 1

Pin	Function
1	N/C
2	Anode
3	Cathode
4	N/C
5	N/C
6	Anode
7	Anode
8	N/C

2: Option 2

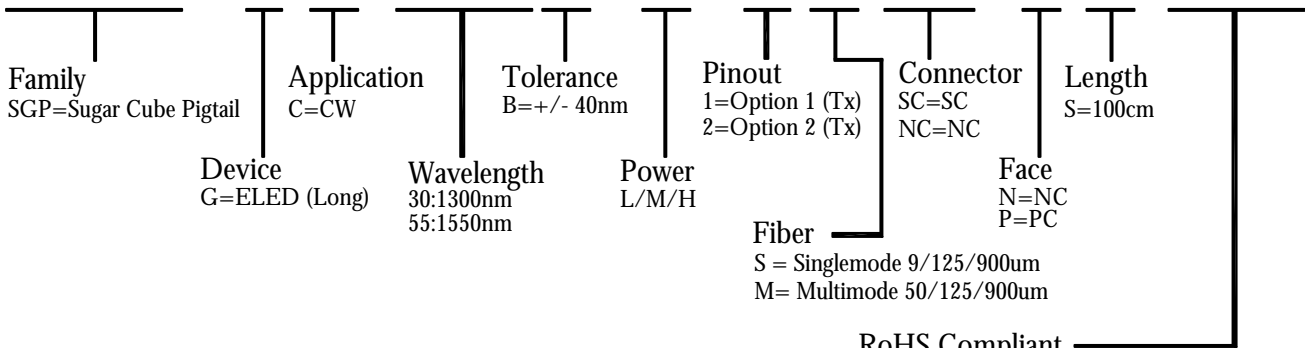
Pin	Function
1	Case GND
2	Anode
3	Cathode
4	Case GND
5	Case GND
6	Anode
7	Anode
8	Case GND

**Packaging Dimension (Units in mm)**



**Ordering Information**

**SGP-GC-XXB-X-XXSC-XS-XX**



**RoHS Compliant**  
 Blank/G5/GR  
 Blank = RoHS non-compliant product  
 G5 = RoHS 5/6-compliant product (lead exemption)  
 GR = Full RoHS compliant product (no exemption)

## Warnings

**Handling Precautions:** This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

**Laser Safety:** Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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