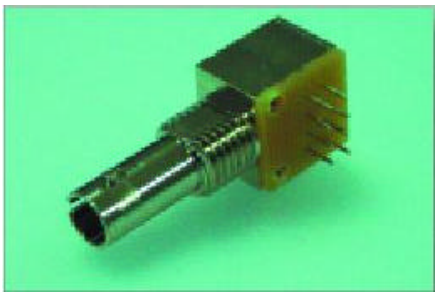
P/N: SGC-GC-XXB-X-XXST-XX

ELED ST Sugar cube Transmitter



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 ST-A
- High Operating Temperature
- ST-A 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 μm SM & 50/125 μm MM fiber)
Optical and Electrical Characteristics 1300nm (Tc=25℃)

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength	λ	1260	1300	1340	nm	CW
Spectral Width	Δ λ	30	-	80	nm	CW
Operating Current	I_{op}	-	80	100	mA	CW
Output Power (SM, 9/125 μm) L M H	P_f	 10 30 50	 - - -	 40 60 80	μW	CW at I_{op}=80mA
Output Power (MM, 50/125 μm) L M H	P_f	 30 50 70	 - - -	 - - -	μW	CW at I_{op}=80mA
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}=30mA

(All optical data refer to a coupled 9/125 μm SM & 50/125 μm MM fiber)
Optical and Electrical Characteristics 1550nm (Tc=25℃)

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength	λ	1510	1550	1590	nm	CW
Spectral Width (RMS)	Δ λ	45	-	80	nm	CW
Operating Current	I_{op}	-	80	100	mA	CW
Output Power (SM, 9/125 μm) L M H	P_f	 10 20 30	 - - -	 - - -	μW	CW at I_{op}=80mA
Output Power (MM, 50/125 μm) L M H	P_f	 20 30 40	 - - -	 - - -	μW	CW at I_{op}=80mA
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}=30mA

LD Pin Assignment

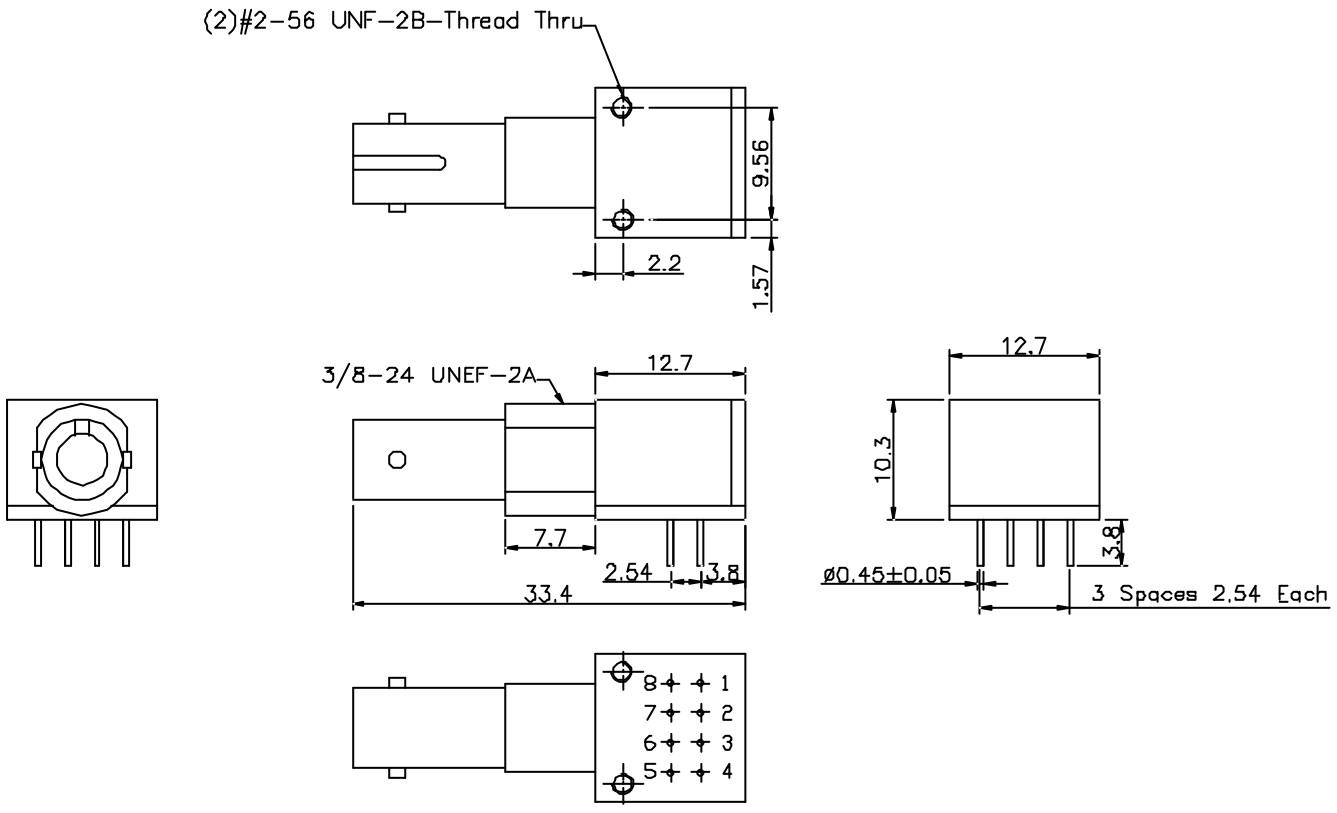
1: Option 1

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

SGC-GC-XXB-X-XXST-XX

Family
SGC=Sugar Cube

Device
G=ELED (Long)

Application
C=CW

Wavelength
30:1300nm
55:1550nm

Tolerance
B=+/- 40nm

Power
L/M/H

Pinout
1=Option 1 (Tx)
2=Option 2 (Tx)

Fiber
S = Singlemode 9/125/900um
M= Multimode 50/125/900um

Connector
ST=ST

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.

Legal Notice

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