Luminent

ELED FC Sugar Cube Transmitter Preliminary



SGC-GC-XXB-X-XXFC-XX

Features

- 1300nm or 1550nm Wavelength
- For Singlmode / Multimode Applications
- High Optical Power
- Low Operating Current
- High Speed
- Low Modal Noise
- 8 Pin Package with FC
- High Operating Temperature
- FC Type Sugar Cube
- For Data com Measurement Application
- RoHS Compliant available

Absolute Maximum	Ratings	(Tc=25	°C)	

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	°C		
Storage Temperature	T _{stg}	-	-40 ~ 85	°C		

(All optical data refer to a coupled 9/125 μ m SM & 50/125 μ m M/M fiber)

Optical and Electrical Characteristics 1300nm (Tc=25°C)

Parameter	Symbol	Min	Тур	Max	Unit	Test Conditions
Wavelength	λ	1260	1300	1340	nm	CW
Spectral Width	Δλ	30	-	80	nm	CW
Operating Current	l _{op}	-	80	100	mA	CW
Output Power (SM, 9/125µm) L M H	P _f	10 30 50	- - -	40 60 80	μW	lop=80 mA
Output Power(MM, 50/125µm) L M H	P _f	30 50 70	- - -	- - -	μW	lop=80 mA
Foward Voltage	Vf	-	1.2	2.0	V	CW
Rise Time	Tr	-	1.5	-	ns	
Fall Time	Τ _f	-	2.5	-	ns	
Output Power Variation		-	4	-	dB	25°C to 70°C

(All optical data refer to a coupled 9/125 μ m SM & 50/125 μ m M/M fiber)

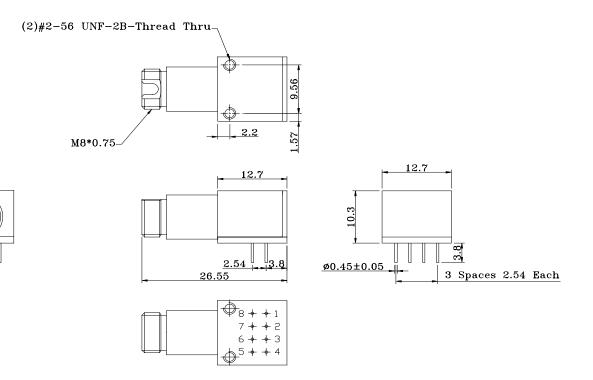
Optical and Electrical Characteristics 1550nm (Tc=25°C)						
Parameter	Symbol	Min	Тур	Мах	Unit	Test Conditions
Peak Wavelength	λ	1510	1550	1590	nm	CW
Spectral Width(RMS)	Δλ	45	-	80	nm	CW
Operating Current	l _{op}	-	80	100	mA	CW
Output Power(SM, 9/125µm) L M H	P _f	10 20 30	- -	- -	μW	lop=80 mA
Output Power(MM, 50/125µm) L M H	P _f	20 30 40			μW	lop=80 mA
Foward Voltage	Vf	-	1.2	2.0	V	CW
Rise Time	T _r	-	1.5	-	ns	
Fall Time	Τ _f	-	2.5	-	ns	
Output Power Variation		-	4	-	dB	25°C to 70°C

LUMINENTOIC.COM

20550 Nordhoff St. • Chatsworth, CA 91311 • tel: 818.773.9044 • fax: 818.576.9486 9F, No 81, Shui Lee Rd. • Hsinchu, Taiwan, R.O.C. • tel: 886.3.5169222 • fax: 886.3.5169213

SGC-GC-XXB-X-XXFC-XX

Package Style : SC Type Sugar Cube Units in mm.



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		

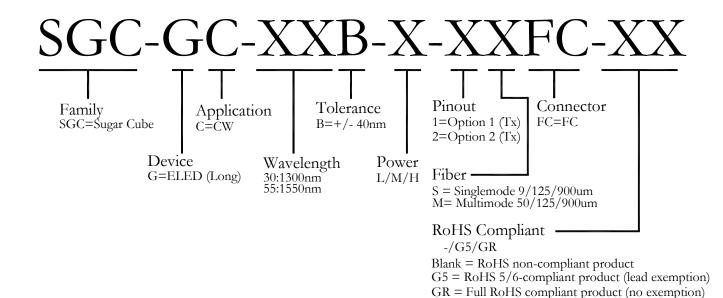
2:0ption 2

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

ELED FC Sugar Cube Transmitter Preliminary

SGC-GC-XXB-X-XXFC-XX





Warnings

HandlingPrecautions: Thisdevice issusceptible todamageas are sult 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

IMPORTANT NOTICE!

 $\label{eq:linear} All information contained in this document is subject to change without notice, at Luminent's sole and absoluted is cretion. Luminent warrants performance of its products to current specifications only in accordance with the company's standard one-year warranty; however, specifications designated as "preliminary" are given to describe components only, and Luminent expressly disclaims any and all warranties for said products, including express, implied, and statutory warranties, warranties of merchantability, fitness for a particular purpose, and non-infringement of proprietary rights. Please refer to the company's sTerms and Conditions of Sale for further warranty information.$

 $\label{eq:liminentassumes} Luminentassumes no liability for applications assistance, customer product design, software performance, or infringement of patents, services, or intellectual property described herein. No license, either expressor implied, is granted under any patent right, copyright, or intellectual property right, and Luminentmakes no representations or warranties that the product(s) described herein are free from patent, copyright, or intellectual property rights. Products described in this document are NOT intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. Luminent customers using or selling products for use in such applications do so at the irown risk and agree to fully defend and indemnify Luminent for any damages resulting from such use or sale.$

THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROVIDED ON AN "AS IS" BASIS. Customer agrees that Luminent is not liable for any actual, consequential, exemplary, orotherdamagesarisingdirectly or indirectly from any use of the information contained in this document. Customer must contact Luminent to obtain the latest version of this publication to verify, before placing any order, that the information contained herein is current.

© Luminent, Inc. 2005 All rights reserved