

C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX



Features

- Uncooled laser diode with MQW structure
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Single frequency operation with high SMSR

Application

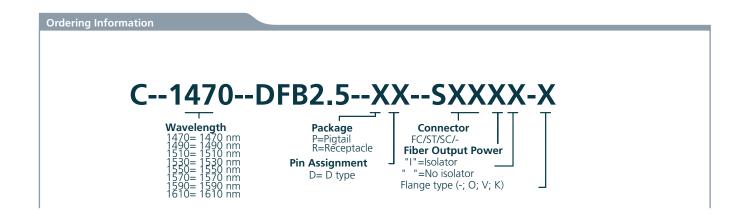
• Designed for 2.5 Gbps CWDM high speed optic networks

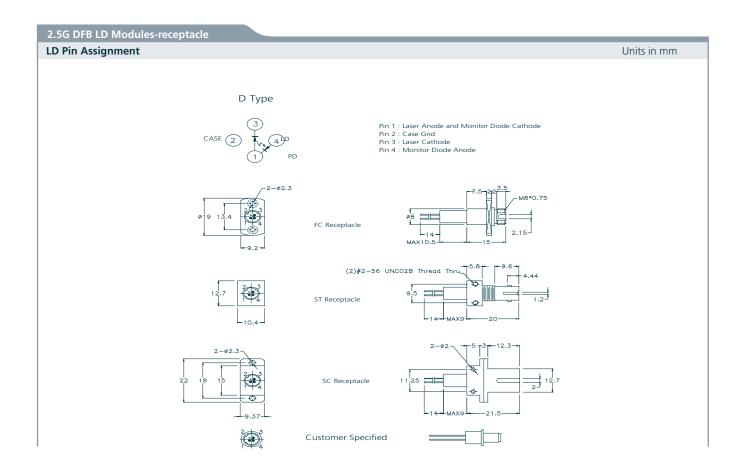
Absolute Max Ratings (T _c = 25°C)							
Parameter	Symbol	Value	Unit				
Fiber Output Power							
L		0.4					
М	P _f	0.9	mW				
Н		1.6					
LD Reverse Voltage	V_{rld}	2	V				
PD Reverse Voltage	V_{rpd}	10	V				
PD Forward Current	I _{fpd}	2	mA				
Operating Temperature	T _{opr}	0 to +70	°C				
Storage Temperature	T _{sta}	-40 to +85	°C				

Optical and Electrical Characteristics (T _c = 25°C)							
Parameter	Symbol	Min.	Тур	Max	Unit	Test condition	
Threshold Current	I _{th}	-	10	15	mA	CW	
Fiber Output Power							
L		0.2	-	0.5			
M	P _f	0.5	-	1	mW	CW, Ith+30mA, kink free	
Н		1	-	2			
2		2	-	3			
Peak Wavelength	λ	n-2	n	n+2	nm		
Side Mode Suppression	S _r	30	35	-	dB	CW, $P_f=P_f(Min)$, 0 to +70°C	
Forward Voltage	V_{F}	-	1.2	1.5	V	CW, Pf=Pf(Min)	
Rise Time, Fall Time	t _r , t _f	-	-	150	Ps	$I_{bias} = I_{th}$, 10 to 90%	
Tracking Error	$\Delta P_f/P_f$	-	-	±1.0	dB	APC, 0 to +70°C	
PD Monitor Current	I _m	100	-	-	μΑ	CW, P _f =P _f (Min),V _{rpd} =2V	
PD Dark Current	I _{DARK}	-	-	0.1	μΑ	V _{rpd} =5V	
PD Capacitance	C _t	-	6	15	pF	V _{rpd} =5V, f=1MHz	



C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX





Units in mm



C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX

Packaging Dimension Fange Type Connector Type For Fix Page Type Sc Sc /PC **O'+Horizonal (Omega Housing) The first Page Type **O'+Horizonal (Omega Housing) The fixed Housing) The fixed Housing Housi

Note: This singlemode transceiver is a class I laser product. it complies with IES 825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical parts of the module will terminate with an optical connector or with a dust plug.

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

IMPORTANT NOTICE!

All information contained in this document is subject to change without notice, at Luminent's sole and absolute discretion. 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 Terms and Conditions of Sale for further warranty information.

Luminent assumes no liability for applications assistance, customer product design, software performance, or infringement of patents, services, or intellectual property described herein. No license, either express or implied, is granted under any patent right, copyright, or intellectual property right, and Luminent makes 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 their own 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, or other damages arising directly 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. 2002 All rights reserved