

1650nm DFB 14pin Butterfly datasheet

P/N : WD65-FA0

Features

14-pin Butterfly Package
Integrated optical isolator, TEC, Thermistor
Single-mode fiber pigtail output, FC/APC connector
Telcordia-GR468

Applications

C2H2 sensor

ABSOLUTE MAXIMUM RATING(TSU=25°C TA=25±5°C)

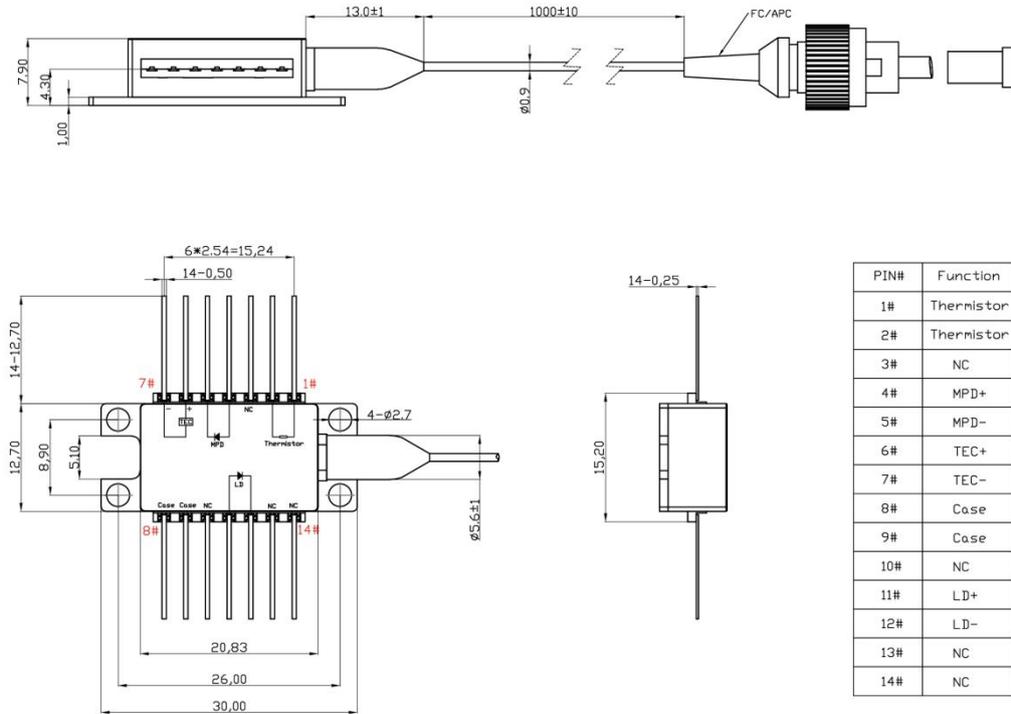
Parameter	Symbol	Units	Min	Max
LD reverse voltage	VRLD	V	-	2
LD forward current	IFLD	mA	-	400
MPD reverse voltage	VRMPD	V	-	10
MPD forward current	IFMPD	mA	-	2
TEC operating current	ITEC	A	-1.0	1.0
TEC operating voltage	VTEC	V	-3.0	3.0
CASE Temperature	TCase	°C	-5	+75
Storage Temperature	TStorage	°C	-40	85
Storage Humidity Range	RH	%	0	95
FlexPadSoldering Temperature	TSoldering	°C	-	260
Flex Pad Soldering Duration	tSoldering	s	-	10

Electrical/Optical Characteristics (TSU=25°C TA=25±5°C)

Parameter	Symbol	Unit	Test Condition	Min.	Typ.	Max.
LD forward current	VFLD	V	CW, IFLD=100mA	-	-	3.0
Threshold current	Ith	mA	CW	-	55	70
Output Power	POut	mW	CW, IFLD =100mA	10	-	-
Peak Wavelength	λP	nm	CW, IFLD=100mA	1647	1650	1653

Parameter	Symbol	Unit	Test Condition	Min.	Typ.	Max.
Side-Mode Suppression Ratio	SMSR	dB	CW, IFLD=100mA	35	-	-
Wavelength-Temperature Drift Coefficient	$\frac{\Delta\lambda P}{\Delta T_{Submount}}$	nm/°C	CW, IFLD=ith~300mA	-	0.1	-
Wavelength-Current Drift Coefficient	$\frac{\Delta\lambda P}{\Delta IFLD}$	nm/mA	CW, IFLD=ith~300mA	-	0.02	-
MPD Backlight Current	IRMPD	mA	VRMPD=5V	0.02	-	2
MPD Dark Current	IdMPD	nA	VRMPD=5V	-	-	100
NTC Thermistor Resistance	RT	kΩ	@25°C	9.5	10	10.5
NTC B-Constant	B	K	@25°C/50°C	3800	3930	4000

Pin Connection Type & Outline Drawings :



Cautions:

- This product emits laser radiation during operation. Never direct the laser beam at any part of the human body.
- This product is electrostatic-sensitive. Operate it only in an ESD-protected area (EPA) , and ensure all tools that come into direct contact with the device are properly grounded. Improper handling may cause permanent and irreversible damage.
- This product is equipped with an optical connector. After testing and inspection, immediately install the dust cap to prevent prolonged exposure of the connector end face, which can lead to contamination or damage.