CWDM DFB Butterfly Laser Module (14 pins)

GTA9070
1270nm~1610nm

Features

- High Linearity Direct Modulation DFB laser
- High Output Power 1~300mW
- Built-in Isolator,TEC, Thermistor and Monitor PD
- Hermetically Sealed 14 Pin Butterfly Package
- RoHs Compliant

Application

- Lond Reach Analog Transmission Systems
- Light Source
- Sensor
- Optical Communication
- Test equipment



1 Absolution Maximun Ratings (Tc=25℃.unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Condition
Laser Chip	I_{FL}	-	1200	mA	Forward Current
	I_{RL}	-	2	mA	Reverse Current
Reverse Voltage (Laser diode)	V_{RL}	-	2	V	Reverse Current <500uA
Storage Temperature	Tstg	-40	+100	℃	-
Soldering Temperature/Time	-		260/10	℃/S	-
Relative Humidity	RH	-	95	%	Top < 30 ℃
Thermal Electric Cooler	-	-	2	V	Voltage
	-	-	1.5	A	Current
Fiber Yield Strength	-	-	30	nm	
Fiber Bend Radius	-	-	1	kgf	
Monitor Detector	V_{RD}	-	15	V	Reverse Voltage
	I_{RD}	-	1	mA	ReversePhoto Current
	I_{FD}	-	2	mA	Forward Current

2 Operating Conditions

Parameters	Symbol	Min.	Max.	Unit	Test Condition
Caser Operating Temperature Range	T_C	- 20	60	℃	-
Power Supply Voltage	V_{CC}	-	5	V	-
Relative Humidity	R_H	-	80	%	-
Bias Current	I_D	-	70	mA	-
TEC Cooler Current	Icooler	-	1	A	ΔT=40K
TEC Voltage	Vcooler	-	2	V	ΔT=40K

3 Specifications (electrical & optical characteristics)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Voltage	Vop	-	-	3	V	CW
Threshold Current	I_{th}	-	10	45	mA	CW
Thermistor	Rth	9.5	10	10.5	KΩ	25 ℃
Monitor Current	Im	10	-	150	uA	CW, Vrd = 5V

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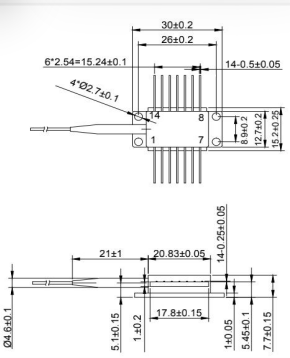
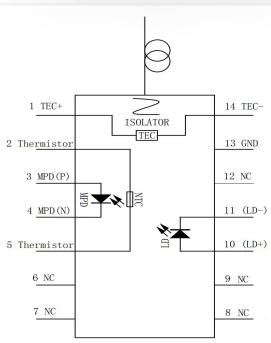
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Thermoelectric cooler current	Icooler	-	-	1000	mA	CW, -5 ℃ ~ 60 ℃
Monitor Dark Current	Id	-	-	500	nA	CW, Vrd = 5V
Central Wavelength	λ_C	λc-3	λc	λc+3	nm	CW, 25 ℃
Output Power	Po	1	-	300	mW	CW
Side Mode Suppression Ratio	SMSR	30	-	-	dB	CW, If = Ith + 20 mA
Slope Efficiency	Se	-	0.3	-	mW/mA	CW
Spectral Width	Δλ	-	-	0.3	nm	CW , - 20dB
Bias Current	I_B	-	-	70	mA	-
Tracking Error	ΔPf	-	-	0.5	dB	CW,-5 ℃ ~ 60 ℃, Im =Im @25 ℃
Monitor PD Capacitance	C	-	-	0.5	pF	Vrd = 5 V, F = 1 MHz
Connector Repeatablility		-	-	0.3	dB	CW
Tracking Error	Er	-	-	1	dB	Tc = - 20 ~ 65 ℃, APC, ATC
Rise Time / Fall Time	Tr / Tf	-	-	2.0	ns	10-90% / 90-10%

* **CWDM DFB wavelength tolerance ±3nm.**
* **LAN-WDM.MWDM.DWDM wavelength tolerance belongs to their specific properties.**
* **1625nm.1650nm.1654nm wavelength tolerance ±5nm.**

4 Dimensions(mm)



Pin Assignment



Please let us know your request details before order.
* * If you have your own Pin Assignment request . Kindly share it with us before order .

Customize for you

5 Order Information

GTA9070 series laser CWDM DFB butterfly laser module

Please let us know
1: wavelength
2:output power
3: fiber type
4: connector
5: pin map (If you have your own request,please let us know it.)
6: with isolator or not

For example

GTA9072729
1270nm DFB butterfly laser moudle 20mW.
SMF FC/APC 1m, with isolator.

New * 1270nm / 1290nm / 1310nm / 1330nm max output power is 300mW.