

## 4GHz 1310nm DFB laser

### Product Features

- Supports up to 6bps bit rates
- Low threshold current
- High output power
- TO56 Header package
- Ball lens cap/ Aspherical lens cap option
- Operating case temperature: -40 to 85 °C
- High reliability
- Compatible with RoHS6

### Product Applications

- Gigabit Ethernet
- Fiber Channel for 4.25G
- Analog communication
- Data communication

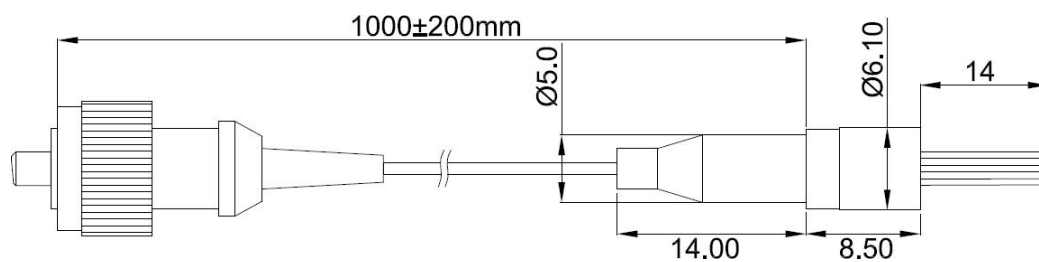
### Performance Specifications

Absolute Maximum Ratings				
Parameter	Symbol	Min.	Max.	Unit
Laser diode forward current	If		150	mA
Laser diode reverse voltage	V		2	V
Front power	Pf		40	mW
PD reverse voltage	V		20	V
Forward current (PD)	Im		2	mA
Operation temperature	To	-40	+85	°C
Storage temperature	Ts	-40	+100	°C
Storage relative humidity	Sr		85	%

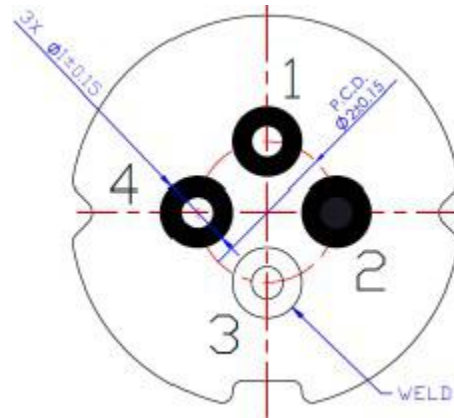
Optical and Electrical Specification (Tc=25°C)						
Parameter	Symbol	Min	Typ	Max	Units	Note
Thershold current	I <sub>th</sub>		8	15	mA	-
Operation current	I <sub>op</sub>		30	40	mA	-
Operation voltage	V <sub>op</sub>			1.6	V	-
Peak wavelength	λ	1260	1310	1360	nm	
Slope efficiency	SE	0.1			W/A	
Spectral width(-20dB)	Δλ		0.2	1	nm	
Side-mode Suppression Ratio	SMSR	30			dB	
Rise/Fall Time	t <sub>r</sub> /t <sub>f</sub>			250	ps	
Bandwidth (-3dB,Po=5mW)	BW	3	4.5		Ghz	-
Monitoring current	I <sub>m</sub>	75		1000	uA	-
Dark current (PD)	I <sub>d</sub>			100	nA	

Notes: All laser chips come from wafers that have been certified using a representative lot of devices that must achieve an acceptable yield for burn-in.

## Outline drawings



## PIN Configuration



Lead	TypeA	TypeC
1	PD Cathode	PD Anode
2	PD Anode	LD Anode/ PD Cathode
3	LD Anode/GND	GND
4	LD Cathode	LD Cathode

(View from lead side)

## Ordering Information

Part number	Note
MT6000-FA00	4G 1310nm Laser with fiber pigtail, FC/APC, 0.9mm, 1m length (TypeA)
MT6000-FA01	4G 1310nm Laser with fiber pigtail, FC/APC, 0.9mm, 1m length (TypeC)