

# DFB Laser Test Report

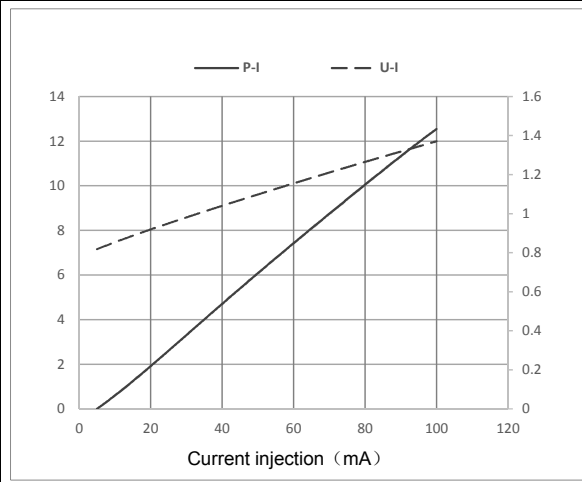
<b>Product</b>	Selected Wavelength Laser Diodes (DFB-1590-5-PM-1-1-N)
<b>Description</b>	1590nm DFB laser diode with PM fiber pigtail,5mw,FC/APC connector
<b>Serial Number</b>	1907018157
<b>Qualification</b>	Telcordia GR-468

### Optical and Electrical Data

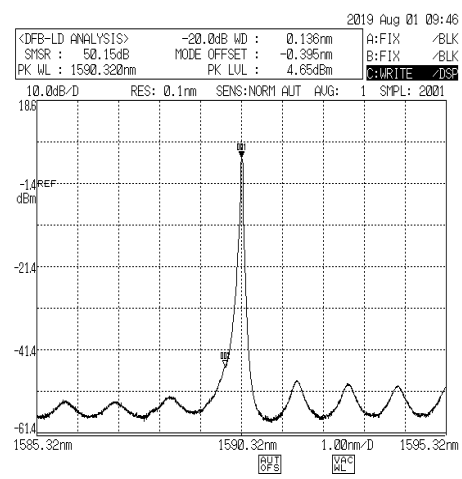
No.	Parameter	Symbol	Unit	Testing result	Requirement	Condition
1	Threshold current	$I_{th}$	mA	5	$\leq 35$	at25.0°C
2	Monitor PD current	$I_{mpd}$	uA	833.2	50-3000	at10mW power
3	Bias at operation	$I_o$	mA	85	$\leq 200$	at10mW power
4	Slope efficiency	DE	mW/mA	0.132	0.05-0.30	at10mW power
5	Bias voltage	$V_f$	V	1.292	$\leq 3$	at10mW power
6	Operating temperature	T	°C	25	15-35	at10mW power
7	Thermistor resist	R	Ohm	10012	9500~10500	at25.0°C
8	Wavelength	$\lambda_c$	nm	1590.225	1590±2	at10mW power
9	Extinction ratio	ER	dB	26.3	$\geq 20$	

NOTE:  $I_{max}=200mA$

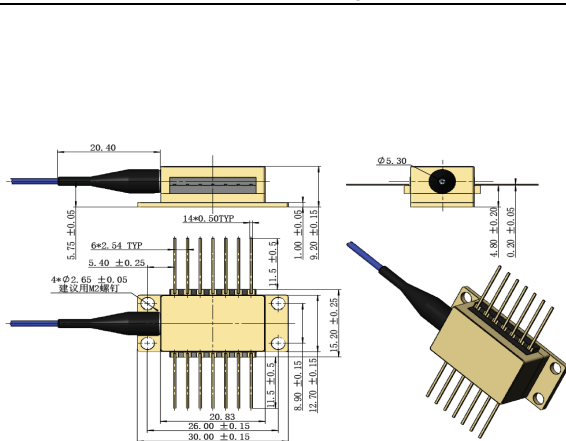
### Laser Diode characteristic graph



### Optical mapping and data

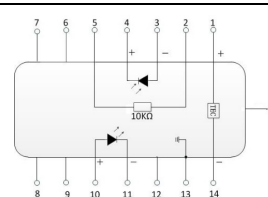


### Outline Drawings



Dimensions are in millimeters.

### Pin Information



1	Thermoelectric Cooler (+)
2	Thermistor
3	PD Monitor Anode (-)
4	PD Monitor Cathode (+)
5	Thermistor
6	NC
7	NC
8	NC
9	NC
10	Laser Anode (+)
11	Laser Cathode (-)
12	NC
13	Case Ground
14	Thermoelectric Cooler (-)