

1654 nm laser diode - DFB

Model 1: >10 mW / singlemode fiber / 14 pin Butterfly with isolator / SMF or PMF

Reference: 1654LD-1-0-0-1 or 2 (SMF or PMF)

Technology: DFB*

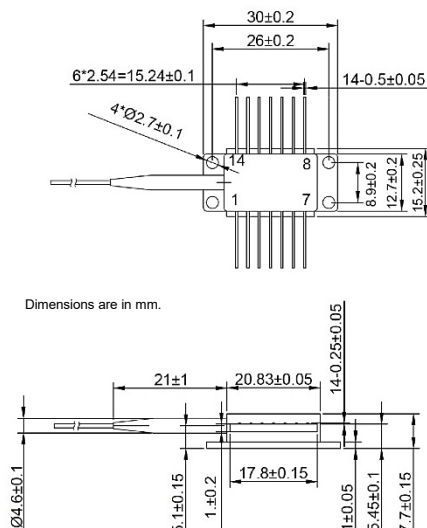
SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	10		
Output Power (Pulse mode)	mW		20	
Center Wavelength (CW)**	nm	1649	1654**	1659
Isolator (Note : contact us for special version with no isolator or double stage isolator)	dB		25	
Spectral Width (FWHM)	MHz		0.5	2
Threshold Current	mA		5	20
Operating Current	mA		60	70
Operation Voltage	V		1.6	1.8
Wavelength shift w Temperature	nm/°C		0.08	
Wavelength shift w Current	nm/mA		0.003	
Side mode suppression ratio	dB	35	50	
Internal Photodiode Responsivity	mA/W	5		
Internal Photodiode Dark Current	nA			500
TEC current (-5/60°C)	A			1
TEC Voltage (-5/60°C)	V			1.5
Internal thermistor (25°C)	kΩ	9.5	10	10.5
Fiber type	SMF28/PM1550 or equivalent			
Coating diameter	μm		900	
Fiber bend radius	mm			30
Storage case temperature	°C	-40 (abs min)		70 (abs max)
Case operating temperature	°C	-20		60
Lead soldering temperature	°C		260	300
Laser diode reverse voltage	V			15
Butterfly pin configuration***	Type-1***			
Pigtail termination	FC/APC connector			
Polarization state (PM version)	Aligned to the slow axis			

*: See our tutorial : [fiber coupled laser diode](#)

**: Possibility to specify a precise wavelength – contact us

***: Possibility to request another butterfly pin configuration: Type-2, Type-2 bias-T, Type 2 bias-T anode grounded...

Form factor & laser diode pin configuration (standard 14-pin Butterfly Type-1)**:



PIN	FUNCTION	PIN	FUNCTION
1	TEC (+)	8	NC
2	Thermistor	9	NC
3	Monitor PD Anode	10	LD Anode (+)
4	Monitor PD Cathode	11	LD Cathode (-)
5	Thermistor	12	NC
6	NC	13	Ground
7	NC	14	TEC (-)

