

1590 nm laser diode - DFB

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

Reference: 1590LD-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	1585	1590**	1595
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		8	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)*** :

