

## 1650 nm laser diode - DFB

Model 1 : >10 mW / singlemode fiber / 14 pin Butterfly package

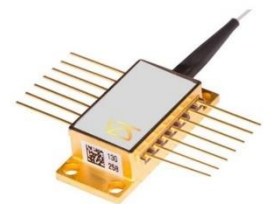
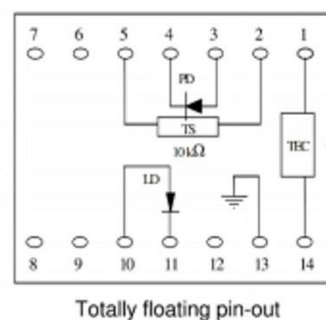
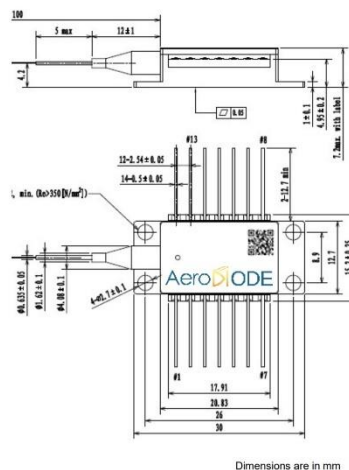
Reference: 1650LD-1-0-0

Technology : DFB\*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	10		
Output Power (Pulse mode)	mW		20	
Center Wavelength (CW)	nm	1645	1650	1655
Spectral Width (FWHM)	kHz		160	200
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)	kOhm	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
Pigtail termination	FC/APC connector			
Polarization state (PM version only)	Aligned to the slow axis			

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

Form factor & Laser diode pinning (standard 14-pin Butterfly Type-1) :



## 1650 nm laser diode - DFB

Model 2 : >20 mW / singlemode fiber / 14 pin Butterfly package

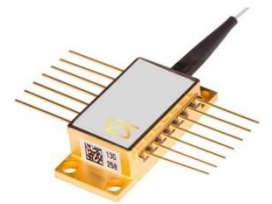
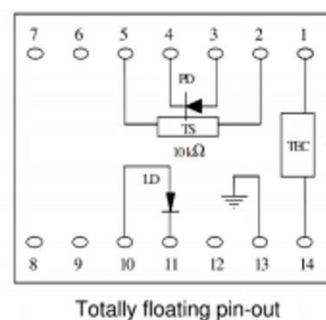
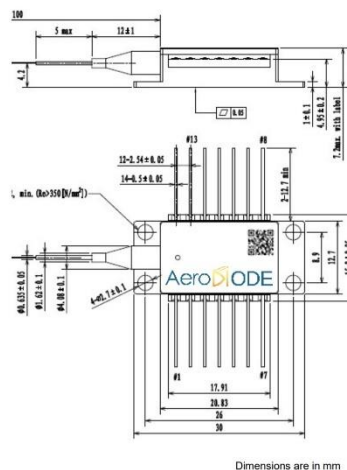
Reference: 1650LD-2-0-0-0/1

Technology : DFB\*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	20		
Output Power (Pulse mode)	mW		40	
Center Wavelength (CW)	nm	1645	1650	1655
Spectral Width (FWHM)	kHz		160	200
Threshold Current	mA		8	20
Operating Current	mA		170	250
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)	kOhm	9.5	10	10.5
Fiber type	SMF28 or PM1550 (or equivalent)			
Coating diameter	µm		900	
Fiber bend radius	mm	30		
Storage case temperature	°C	-40		70
Case operating temperature	°C	-20		60
Lead soldering temperature	°C	255	260	265
Laser diode reverse voltage	V			15
Pigtail termination	FC/APC connector			
Polarization state	Aligned to the slow axis (PM version only)			

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

Form factor & Laser diode pinning (standard 14-pin Butterfly) :



## 1650 nm laser diode - DFB

Model 3 : >40 mW / singlemode fiber / 14 pin Butterfly package

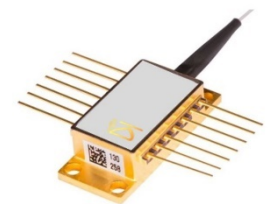
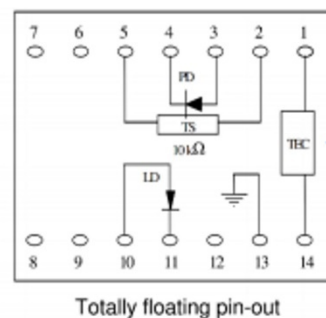
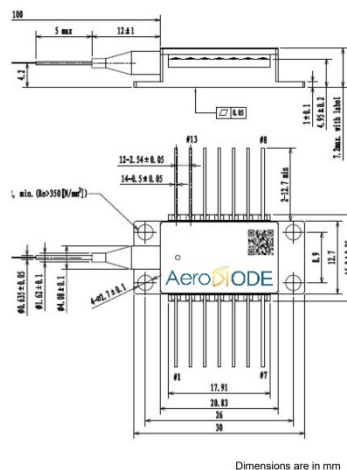
Reference: 1550LD-3-0-0-0/1

Technology : DFB\*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	100		
Output Power (Pulse mode)	mW		>180	
Center Wavelength (CW)	nm	1645	1650	1655
Spectral Width (FWHM)	kHz		160	200
Threshold Current	mA		15	20
Operating Current	mA		250	350
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)	kOhm	9.5	10	10.5
Fiber type	SMF-28 / PM1550 (or equivalent)			
Coating diameter	µm		900	
Fiber bend radius	mm	30		
Storage case temperature	°C	-40		70
Case operating temperature	°C	-20		60
Lead soldering temperature	°C		260	300
Laser diode reverse voltage	V			15
Pigtail termination	FC/APC connector			
Polarization state	Aligned to the slow axis (PM version only)			

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

Form factor & Laser diode pinning (standard 14-pin Butterfly Type-1) :



## 1650 nm laser diode - DFB

Model 4 : >100 mW / singlemode fiber / 14 pin Butterfly package

Reference: 1650LD-4-0-0

Technology : DFB\*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	100		
Output Power (Pulse mode)	mW		>180	
Center Wavelength (CW)	nm	1645	1650	1655
Spectral Width (FWHM)	kHz		160	200
Threshold Current	mA		20	30
Operating Current	mA		700	800
Operation Voltage	V		1.8	2.0
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)	kOhm	9.5	10	10.5
Fiber type	PM1550 or equivalent			
Coating diameter	µm		900	
Fiber bend radius	mm	30		
Storage case temperature	°C	-40		70
Case operating temperature	°C	-20		60
Lead soldering temperature	°C		260	300
Laser diode reverse voltage	V			15
Pigtail termination	FC/APC connector			
Polarization state (PM version)	Aligned to the slow axis			

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

Form factor & Laser diode pinning (standard 14-pin Butterfly Type-1) :

