

785 nm Singlefrequency DFB laser diode

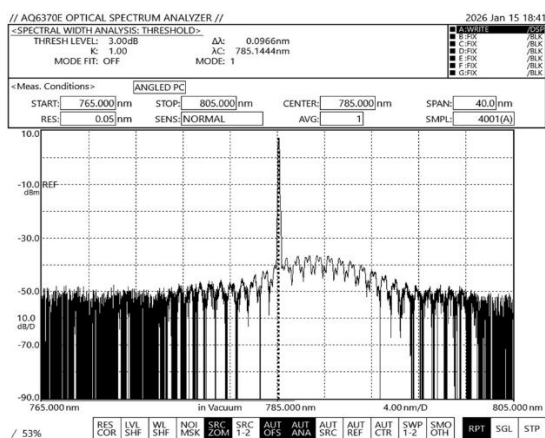
Model 1a: 30 mW / singlemode fiber / butterfly package

Reference: 785LD-1a-SM/PM-NI

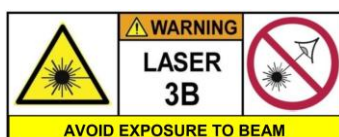
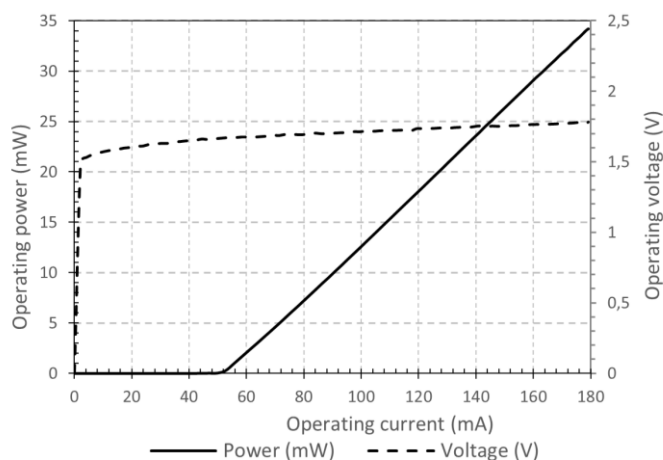


SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	mW	30	40	
Technology		DFB		
Center Wavelength	nm	784	785	786
Spectral Width (FWHM) /	kHz		200	
Threshold Current	mA		20	80
Operating Current	mA		150	200
Operating Voltage	V		2.0	2.5
Wavelength shift w Temperature	nm/°C		0.04	
Wavelength shift w Current	nm/A		1.0	
Side mode suppression ratio	dB	40	50	
Internal photodiode responsivity	mA/W	0.04	3	10
Internal photodiode dark current	nA		5	40
TEC current (abs max rating)	A			3
TEC voltage (abs max rating)	V			4
Internal thermistor (25°)	kOhm	9.5	10	10.5
Fiber type (OPTION 1: PM fiber)		Hi780 or equivalent (PM780 or equivalent)		
PER	dB		18	
Fiber bend radius	mm	25		
Fiber connector		Yes (FC/APC)		
Storage temperature	°C	-40		85
Operating case temperature	°C	-20		70
Operating chip temperature	°C	20		40
Laser diode reverse voltage (absolute maximum rating)	V			2
Internal isolator		No		

Emission spectrum & LIV @ 25°C

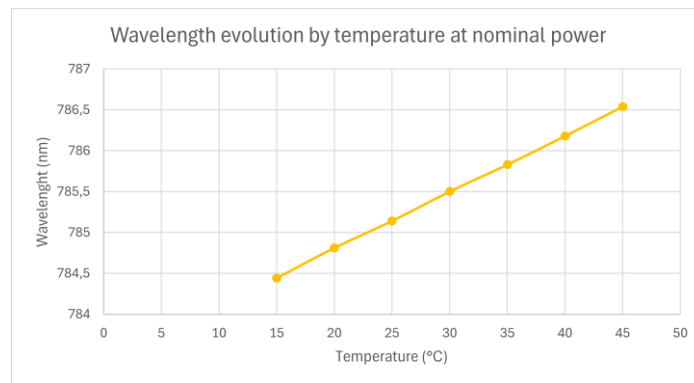
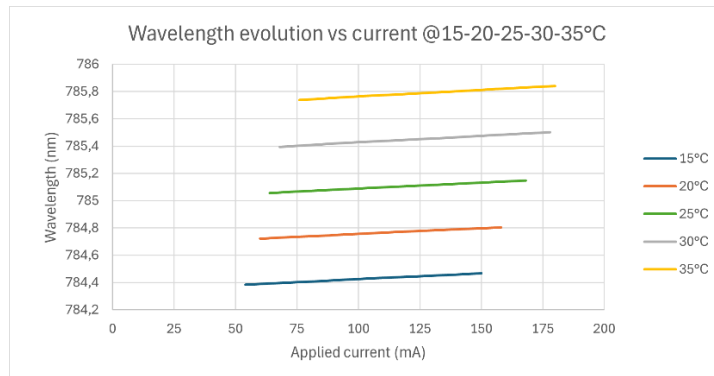


Spectrum linewidth limited by the OSA resolution



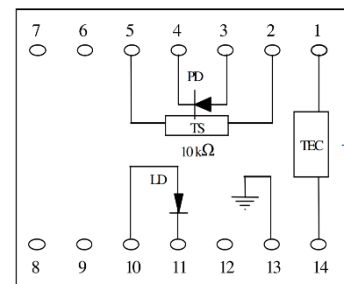
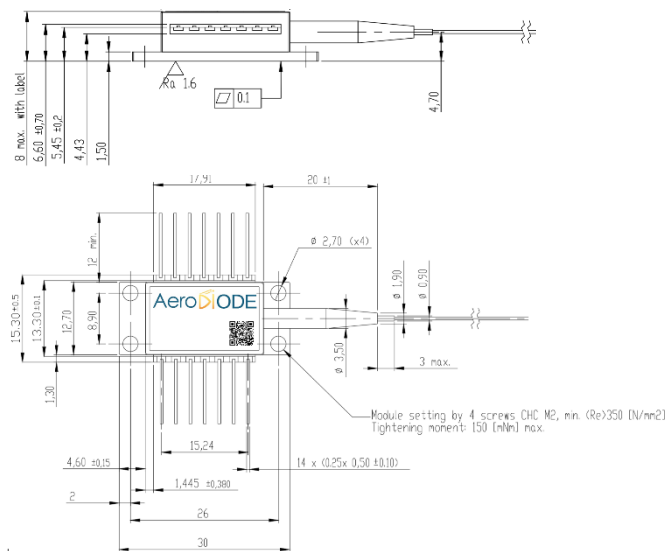
Laser diodes are classified based on continuous operation - Contact us for any special requests regarding classification or power limitation.

Example of wavelength variation with current and temperature*

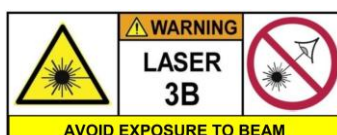


*Contact AeroDIODE for specific wavelength requirements.

Form factor: Laser diode pin configuration (Type-1)



Totally floating pin-out



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