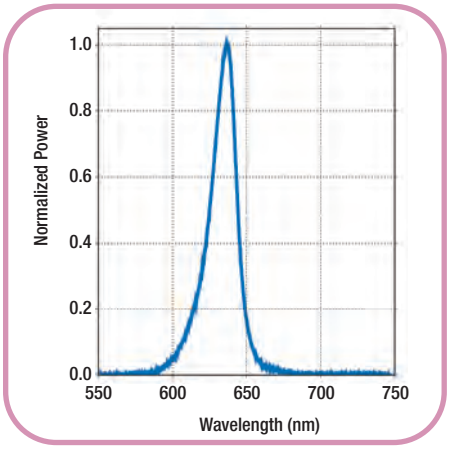
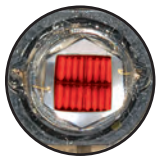
627 nm Mounted or Mounted and Collimated LEDs



- High-Power LED
- Average Lifetime of 100,000 Hours
- Mounted on Heatsink
- Compatible with Our DC2100 LED Controller (See Page 1105)


Typical Emitter

CHARACTERISTIC (T_a = 25 °C, I = 700 mA)	MIN	TYP	MAX
Peak Wavelength	620 nm	627 nm	645nm
Spectral Full Width	–	48.4 nm	–
Forward Current	–	–	1540 mA
Peak Pulsed Forward Current	–	2200 nm	–
Forward Voltage	–	3.5 V	–
Operating Temperature	-40 °C	–	120 °C
Storage Temperature	-40 °C	–	120 °C
Lifetime	–	100,000 hrs	–

Mounted LED, P = 500 mW

- Uncollimated, Lambertian Radiation Pattern.
- Internally SM1 Threaded


LEDC27

Collimated LED, P = 144 - 174 mW

- Closely Collimated Beam
- High Power Density
- Adjustable Focus
- Designed to Integrate Into Standard Microscopes

Thorlabs offers 627 nm mounted LEDs with or without collimation optics. Both types of units use the same LED with EEPROM, which is housed in an internally SM1-threaded housing. The mounted LED can be easily incorporated into lens tube or cage systems via the SM1 threading. The collimated versions house an optic in a microscope-compatible adapter that can be easily installed into the epi-illumination port of many microscopes made by Leica, Nikon, Zeiss, or Olympus.

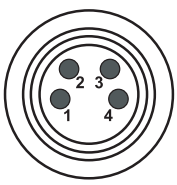
Drivers

We recommend using the DC2100 LED driver to control the LED. The DC2100 is a more sophisticated controller that is capable of CW or pulsed operation up to 10 kHz. If an external trigger is used, pulse frequency can be increased up to 100 kHz. Additionally, the DC2100 can read the LED's EEPROM, which contains operating parameters, such as the maximum current, that help to prolong the life of the LED. Please see pages 1223-1228 for more details on this driver as well as other compatible drivers.

DC2100

ITEM#	MICROSCOPE	POWER	BEAM	BEAM AREA
LEDC25	Olympus BX/IX	174 mW	Ø50 mm	1963 mm²
LEDC26	Leica DMI	144 mW	Ø37 mm	1075 mm²
LEDC27	Nikon Eclipse (F Mount)	152 mW	Ø43 mm	1452 mm²
LEDC28	Zeiss Axioskop	153 mW	Ø44 mm	1521 mm²

NEW products



Pin	Description
1	LED +Ve
2	LED -Ve
3	Not Connected
4	Not Connected

ITEM#	$	£	€	RMB	DESCRIPTION
M627L1	$ 127.50	£ 88.40	€ 113,20	¥ 1,076.70	627 nm, 500 mW, Mounted LED
LEDC25	$ 331.50	£ 229.90	€ 294,40	¥ 2,799.20	627 nm, 174 mW, Collimated LED for Olympus BX/IX Microscopes
LEDC26	$ 331.50	£ 229.90	€ 294,40	¥ 2,799.20	627 nm, 144 mW, Collimated LED for Leica DMI Microscopes
LEDC27	$ 331.50	£ 229.90	€ 294,40	¥ 2,799.20	627 nm, 152 mW, Collimated LED for Nikon Eclipse (F Mount) Microscopes
LEDC28	$ 331.50	£ 229.90	€ 294,40	¥ 2,799.20	627 nm, 153 mW, Collimated LED for Zeiss Axioskop Microscopes
DC2100	$ 1,750.00	£ 1,213.00	€ 1.553,50	¥ 14,778.00	High-Power LED Driver with Modulation, 2000 mA