455 nm Mounted or Mounted and Collimated LEDs



- High-Power LED
- Average Lifetime: 100,000 Hours
- Mounted on Heatsink
- Compatible with Many of Our LED Controllers (See Pages 1223-1228)

CHARACTERISTIC (T _a = 25 °C)	MIN	ТҮР	MAX		
Peak Wavelength	440 nm	455 nm	460 nm		
Spectral Full Width	-	38 nm	-		
Forward Current	-	-	700 mA		
Peak Pulsed Forward Current	-	-	1,000 mA		
Forward Voltage	5.43 V	6.8 V	8.31 V		
Operating Temperature	-40 °C	-	120 °C		
Storage Temperature	-40 °C	-	120 °C		
Lifetime	-	100,000 hrs	-		

NEW products

Typical Emitter

Mounted LEDs that provide light output at 455 nm are available with or without collimation optics. Both types of units use the same LED with EEPROM, which is housed in an internally SM1threaded 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 either the LEDD1A T-Cube driver or the DC2100 LED driver to control the LED. The T-Cube version is compact and offers basic controls for current and toggling between CW or pulsed operation. When pulsing the LED, an external trigger must be connected to the T-Cube's BNC connection. Please note that a power supply is not included with our T-Cubes, but the TPS001 single-channel power supply is available below.

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 these drivers as well as other compatible drivers.

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



Mounted LED, P = 730 mW

- Uncollimated, Lambertian Radiation Pattern
- Internally SM1 Threaded



Collimated LED, P = 132 - 160 mW

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

ITEM#	MICROSCOPE	POWER	BEAM	BEAM AREA
LEDC1	Olympus BX/IX	160 mW	Ø50 mm	1963 mm ²
LEDC2	Leica DMI	132 mW	Ø37 mm	1075 mm ²
LEDC3	Nikon Eclipse (F Mount)	140 mW	Ø43 mm	1452 mm ²
LEDC4	Zeiss Axioskop	141 mW	Ø44 mm	1521 mm ²

ITEM#	\$		£		€		RMB	DESCRIPTION
M455L1	\$ 127.50	£	88.40	€	113,20	¥	1,076.70	455 nm, 730 mW, Mounted LED
LEDC1	\$ 331.50	£	229.90	€	294,40	¥	2,799.20	455 nm, 160 mW, Collimated LED for Olympus BX/IX Microscopes
LEDC2	\$ 331.50	£	229.90	€	294,40	¥	2,799.20	455 nm, 132 mW, Collimated LED for Leica DMI Microscopes
LEDC3	\$ 331.50	£	229.90	€	294,40	¥	2,799.20	455 nm, 140 mW, Collimated LED for Nikon Eclipse (F Mount) Microscopes
LEDC4	\$ 331.50	£	229.90	€	294,40	¥	2,799.20	455 nm, 141 mW, Collimated LED for Zeiss Axioskop Microscopes
LEDD1A*	\$ 269.00	£	186.50	€	238,90	¥	2,271.50	T-Cube LED Driver, 1000 mA
TPS001	\$ 25.00	£	17.40	€	22,20	¥	211.20	T-Cube Power Supply
DC2100	\$ 1,750.00	£	1,213.00	€	1.553,50	¥	14,778.00	High-Power LED Driver with Modulation, 2000 mA

* Power supply sold separately, see TPS001 or pa

TECHNOLOGY **T** Liaht

- **Coherent Sources**
- Incoherent Sources
 - Covega

Drivers/Mounts

Accessories

SECTIONS V

Mounted LEDs

Unmounted LEDs

SLDs

ASE Sources

Lamps