

LED280J - May 11, 2021

Item # LED280J was discontinued on May 11, 2021 For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

HIGH-POWER UV LEDs WITH BALL LENS

- ▶ Center Wavelengths from 250 nm to 280 nm
- ▶ High Optical Output Power and 7.5° Viewing Half Angle
- ▶ Long Lifetime: >1000 Hours

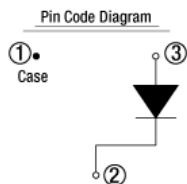


LED280J UV LED in an S1LEDM Mount Inside an HSLT2 Heat Sink Lens Tube

OVERVIEW

Features

- Five Center Wavelengths: 250 nm, 255 nm, 260 nm, 275 nm, or 280 nm
- Optical Output Power Exceeds 1 mW
- Integrated Ball Lens for Increased Forward Intensity
- Lifetime >1000 Hours



Modified H pin code, in which the cathode is not grounded to the case.

These UV LEDs are compact light sources in a hermetically sealed TO-39 package with an integrated ball lens. They provide an output power of at least 1 mW at peak wavelengths from 250 nm to 280 nm, with a small viewing half angle of 7.5°. An exceptionally long lifetime of at least 1000 hours ensures uninterrupted, continuous operation. With these specifications, these UV LEDs are well suited for a wide range of applications including disinfection, forensic analysis, and optical sensing and imaging of biological markers.

These UV LEDs can be mounted in Thorlabs' SM-threaded passive mounts for LEDs, such as the SM1 (1.035"-40) threaded S1LEDM. The LEDs generate up to 1 W of heat and must be kept at a case temperature below 55 °C at a forward current of 100 mA. For temperature regulation, the passive HSLT2 heat sink lens tube is recommended for use with the S1LEDM mount. The TO-39 package of the UV LEDs follows a modified H pin code, in which the cathode is not grounded to the case. In addition to the UV LEDs on this page, Thorlabs also offers a selection of other LEDs in the 245 - 4600 nm spectral range.











LED Selection Guide

LED Selection Guide		
Single LEDs		
Package	Wavelengths	Power ^a
Unmounted	245 nm - 4.5 μm	170 mW
Unmounted, High-Power UV	250 - 280 nm	1 mW (Min.)
Circuit Board ^b	265 - 1550 nm	900 mW
Heatsink Mounted		
Fiber Coupled	280 - 1050 nm	14.5 mW ^c
Collimated for Microscopy	365 - 940 nm	500 mW
FLIM Sources ^d	365 - 850 nm	N/A
Multiple LED Sources		
4-Wavelength	365 - 660 nm	310 mW
Standard Arrays	365 - 850 nm	322 mW
LED Drivers		

- ^aMaximum Power Unless Otherwise Specified
- ^bMetal-Core Printed Circuit Board (MCPCB)
- ^cTypical Power for MM Fiber with Ø400 μm Core, 0.39 NA
- ^dThese high frequency sources are designed for frequency domain Fluorescence Lifetime Imaging (FLIM)

LED SELECTION GUIDE

Light Emitting Diode (LED) Selection Guide

(Click Representative Photo to Enlarge; Not to Scale)										
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy (Item # Prefix ^a)	Fiber-Coupled LEDs ^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options ^c	LED Arrays
Single Color LEDs										
250 nm	LED250J (1 mW Min)	-	-	-	-	-	-	-	-	-
255 nm	LED255W (0.4 mW)	-	-	-	-	-	-	-	-	-
	LED255J (1 mW Min)									
260 nm	LED260W (1 mW)	-	-	-	-	-	-	-	-	-
	LED260J (1 mW Min)									
265 nm	LED265W2 (1.6 mW)	-	-	M265D2 (10 mW Min)	M265L3 (10 mW Min)	-	-	-	-	-
				M265D3 (24 mW Min)						
275 nm	LED275W (1.6 mW)	-	-	M275D2 (45 mW Min)	M275L4 (45 mW Min)	-	-	-	-	-
	LED275J (1 mW Min)			M275D3 (47.3 mW ^d Min)						
280 nm	LED280J (1 mW Min)	-	-	-	-	-	-	-	-	-
	LED280W (2.3 mW)									
285 nm	LED285W (1.6 mW)	-	-	M285D3 (50 mW Min)	M285L5 (50 mW Min)	-	M285F4 (590 μW)	-	-	-
290 nm	LED290W (1.6 mW)	-	-	-	-	-	-	-	-	-
295 nm	LED295W (1.2 mW)	-	-	-	-	-	-	-	-	-
300 nm	LED300W (1.2 mW)	-	-	M300D3 (26 mW Min)	M300L4 (26 mW Min)	-	M300F2 (320 μW)	-	-	-
308 nm	-	-	-	M310D1 (38.5 mW Min ^d)	M310L1 (38.5 mW Min ^d)	-	M310F1 (0.51 mW ^d)	-	-	-
310 nm	LED310W (1.5 mW)	-	-	-	-	-	-	-	-	-
	LED315W (1 mW)									
325 nm	LED325W2 (1.7 mW)	-	-	M325D3 (25 mW Min)	M325L5 (25 mW Min)	-	M325F4 (350 μW)	-	-	-
340 nm	LED340W (1.7 mW)	-	-	M340D3 (53 mW Min)	M340L4 (53 mW Min)	-	M340F3 (1.06 mW)	-	-	-
	LED341W (0.33 mW)									

365 nm	-	-	-	M365D1 (190 mW Min)	M365L2 (190 mW Min)	M365L2 (60 mW) ^e	M365F1 (4.1 mW)	SOLIS-365C (3.0 W) ^f	Chrolis (1130 mW)	LIU365A (31 mW)
					M365L3 (880 mW Min)					
	M365D2 (1150 mW Min)	M365LP1 (1350 mW Min)	M365LP1 (350 mW) ^e	M365FP1 (15.5 mW)						
375 nm	LED375L (1 mW)	-	-	M375D4 (1270 mW Min)	M375L4 (1270 mW Min)	-	M375F2 (4.23 mW)	-	-	-
	LED370E (2.5 mW)									
385 nm	LED385L (5 mW)	-	-	M385D1 (270 mW Min)	M385L2 (270 mW Min)	M385L2 (90 mW) ^e	M385F1 (10.7 mW)	SOLIS-385C (5.8 W) ^f	Chrolis (1250 mW)	-
					M385L3 (1240 mW Min)	M385L3 (450 mW) ^e				
	M385D2 (1650 mW Min)	M385LP1 (1650 mW Min)	M385LP1 (520 mW) ^e	M385FP1 (23.2 mW)						
395 nm	LED395L (6 mW)	-	-	M395D3 (400 mW Min)	M395L4 (400 mW Min)	-	M395F3 (6.8 mW)	-	-	-
				M395D4 (1420 mW Min)	M395L5 (1130 mW Min)		M395LP1 (1420 mW Min)			
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy (Item # Prefix^a)	Fiber-Coupled LEDs^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options^c	LED Arrays
Single Color LEDs										
405 nm	LED405L (6 mW)	-	-	M405D2 (1500 mW Min)	M405L4 (1000 mW Min)	M405L3 (440 mW) ^e	M405F1 (3.7 mW)	SOLIS-405C (3.9 W) ^f	Chrolis (900 mW)	-
	LED405E (10 mW)					M405L4 (510 mW) ^g			4- Wavelength Source (290 mW)	
					M405LP1 (1200 mW Min)	M405LP1 (450 mW) ^e	M405FP1 (24.3 mW)			
415 nm	-	-	-	M415D2 (1640 mW Min)	M415L4 (1310 mW Min)	-	M415F3 (21.3 mW)	SOLIS-415C (5.8 W) ^f	-	-
					M415LP1 (1640 mW Min)					
420 nm	-	-	-	-	-	-	-	-	Chrolis (710 mW)	-
									4- Wavelength Source (95 mW)	
430 nm	LED430L (8 mW)	-	-	M430D2 (490 mW Min)	M430L4 (490 mW Min)	-	-	-	-	-
445 nm	-	-	-	-	-	-	-	SOLIS-445C (5.4 W) ^f	-	-
450 nm	LED450L (7 mW)	-	LEDS450 (250 mW)	M450D3 (1850 mW Min)	M450LP1 (1850 mW Min)	-	-	-	-	-
455 nm	-	-	-	M455D3 (1150 mW Min)	M455L4 (1150 mW Min)	M455L3 (400 mW) ^h	M455F3 (24.5 mW)	-	-	4- Wavelength Source (310 mW)
						M455L4 (490 mW) ^e				

617 nm	-	-	-	M617D2 (600 mW Min)	M617L3 (600 mW Min)	M617L3 (230 mW) ^e	M617F2 (13.2 mW)	SOLIS-617C (1.5 mW) ^f	4- Wavelength Source (210 mW)	-
				M617D3 (660 mW Min)	M617L4 (660 mW Min)	M617L4 (280 mW) ^e				
623 nm	-	-	-	-	-	-	-	SOLIS-623C (3.8 W) ^f	-	-
625 nm	LED625L (12 mW)	-	-	M625D3 (700 mW Min)	M625L4 (700 mW Min)	M625L3 (270 mW) ^e	M625F1 (17.5 mW)	-	Chrolis (490 mW)	-
						M625L4 (490 mW) ^e			4- Wavelength Source (240 mW)	
630 nm	LED630L (16 mW)	-	-	-	-	-	-	-	-	LIU630A (208 mW)
635 nm	LED631E (4 mW)	-	-	-	-	-	-	-	-	-
	LED635L (170 mW)									
639 nm	LED630E (7.2 mW)	-	-	-	-	-	-	-	-	-
645 nm	LED645L (16 mW)	-	-	-	-	-	-	-	-	-
660 nm	LED660L (13 mW)	-	-	M660D2 (940 mW Min)	M660L4 (940 mW Min)	M660L4 (400 mW) ^e	M660F1 (15.5 mW)	SOLIS-660C (2.0 W) ^f	4- Wavelength Source (210 mW)	-
670 nm	LED670L (12 mW)	-	-	-	-	-	-	-	-	-
680 nm	LED680L (8 mW)	-	-	M680D2 (180 mW Min)	M680L4 (180 mW Min)	-	M680F3 (2.7 mW)	-	-	-
700 nm	-	EP700S04 (5 mW Min)	-	M700D2 (80 mW Min)	M700L4 (80 mW Min)	-	M700F3 (1.7 mW)	-	-	-
		EP700S10 (30 mW Min)								
730 nm	-	-	-	M730D3 (540 mW Min)	M730L5 (540 mW Min)	-	-	-	-	-
740 nm	-	-	-	-	-	-	M740F2 (6.0 mW)	SOLIS-740C (2.0 W) ^f	-	-
750 nm	LED750L (18 mW)	-	-	-	-	-	-	-	-	-
760 nm	LED760L (24 mW)	-	-	-	-	-	-	-	-	-
770 nm	LED770L (22 mW)	-	-	-	-	-	-	-	-	-
780 nm	LED780E (18 mW)	-	-	M780D2 (200 mW Min)	M780L3 (200 mW Min)	M780L3 (130 mW) ^e	M780F2 (7.5 mW)	-	Chrolis (40 mW)	LIU780A (315 mW)
	LED780L (22 mW)			M780D3 (800 mW Min)	M780LP1 (800 mW Min)					
800 nm	LED800L (20 mW)	-	-	-	-	-	-	-	-	-
810 nm	LED810L (22 mW)	EP810S04 (16 mW Min)	-	M810D2 (325 mW Min)	M810L3 (325 mW Min)	M810L3 (210 mW) ^e	M810F2 (6.5 mW)	-	-	-
		EP810S10 (90 mW Min)		M810D3 (363 mW Min)	M810L4 (363 mW Min)					
830 nm	LED830L (22 mW)	-	-	-	-	-	-	-	-	-
840 nm	LED840L (22 mW)	-	-	-	-	-	-	-	-	-
				M850D2	M850L3					

850 nm	LED851L (13 mW)	-	-	(900 mW Min)	(900 mW Min)	M850L3 (330 mW) ^e	M850F3 (8.6 mW Min) ^d	SOLIS-850C (2.7 W) ^f	-	LIU850A (322 mW)
				M850D3 (1400 mW)	M850LP1 (1400 mW Min)					
870 nm	LED870E (22 mW)	-	-	-	-	-	-	-	-	-
	LED870L (24 mW)									
880 nm	-	-	-	M880D2 (300 mW Min)	M880L3 (300 mW Min)	-	M880F2 (3.4 mW)	-	-	-
890 nm	LED890L (12 mW)	-	-	-	-	-	-	-	-	-
910 nm	LED910L (10 mW)	-	-	-	-	-	-	-	-	-
	LED910E (12 mW)									
930 nm	LED930L (15 mW)	-	-	-	-	-	-	-	-	-
940 nm	LED940E (18 mW)	-	-	M940D2 (800 mW Min)	M940L3 (800 mW Min)	M940L3 (320 mW) ^e	M940F3 (14.2 mW)	SOLIS-940C (2.5 W) ^f	-	-
970 nm	LED970L (5 mW)	-	-	M970D3 (600 mW Min)	M970L4 (600 mW Min)	-	M970F3 (8.1 mW)	-	-	-
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy (Item # Prefix^a)	Fiber-Coupled LEDs^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options^c	LED Arrays

Single Color LEDs

1050 nm	LED1050E (2.5 mW)	-	-	M1050D1 (50 mW Min)	M1050L2 (50 mW Min)	-	-	-	-	-
	LED1050L (4 mW)			M1050D3 (160 mW Min)	M1050L4 (160 mW Min)		M1050F3 (3 mW)			
1070 nm	LED1070L (4 mW)	-	-	-	-	-	-	-	-	-
	LED1070E (7.5 mW)									
1085 nm	LED1085L (5 mW)	-	-	-	-	-	-	-	-	-
1100 nm	-	-	-	M1100D1 (168 mW ^d Min)	M1100L1 (168 mW ^d Min)		M1100F1 (5.4 mW ^d)			
1200 nm	LED1200E (2.5 mW)	-	-	M1200D2 (30 mW Min)	M1200L3 (30 mW Min)	-	-	-	-	-
	LED1200L (5 mW)									
1300 nm	LED1300E (2 mW)	-	-	M1300D2 (25 mW Min)	M1300L3 (25 mW Min)	-	-	-	-	-
	LED1300L (3.5 mW)									
1450 nm	LED1450E (2 mW)	-	-	M1450D2 (31 mW Min)	M1450L3 (31 mW Min)	-	-	-	-	-
	LED1450L (5 mW)									
1550 nm	LED1550E (2 mW)	-	-	M1550D2 (31 mW Min)	M1550L3 (31 mW Min)	-	-	-	-	-
	LED1550L (4 mW)									
1600 nm	LED1600L (2 mW)	-	-	-	-	-	-	-	-	-
1650 nm	LED1600P	-	-	M1650D2	M1650L4	-	-	-	-	-

	(1.2 mW)			(13 mW Min)	(13 mW Min)					
1750 nm	LED1700P (1.2 mW Quasi-CW, 30 mW Pulsed)	-	-	-	-	-	-	-	-	-
1850 nm	LED1800P (0.9 mW Quasi-CW, 20 mW Pulsed)	-	-	-	-	-	-	-	-	-
1950 nm	LED1900P (1.0 mW Quasi-CW, 25 mW Pulsed)	-	-	-	-	-	-	-	-	-
2050 nm	LED2050P (1.1 mW Quasi-CW, 28 mW Pulsed)	-	-	-	-	-	-	-	-	-
2350 nm	LED2350P (0.8 mW Quasi-CW, 16 mW Pulsed)	-	-	-	-	-	-	-	-	-
2700 nm	LED2700W (0.15 mW Quasi-CW, 1.0 mW Pulsed)	-	-	-	-	-	-	-	-	-
2800 nm	LED2800W (0.3 mW Quasi-CW, 2.0 mW Pulsed)	-	-	-	-	-	-	-	-	-
3400 nm	LED3400W (0.3 mW Quasi-CW, 2.0 mW Pulsed)	-	-	-	-	-	-	-	-	-
3800 nm	LED3800W (0.18 mW Quasi-CW, 1.5 mW Pulsed)	-	-	-	-	-	-	-	-	-
4200 nm	LED4300P (0.03 mW Quasi-CW, 0.2 mW Pulsed)	-	-	-	-	-	-	-	-	-
4300 nm	LED4300W (0.18 mW Quasi-CW, 1.5 mW Pulsed)	-	-	-	-	-	-	-	-	-
4500 nm	LED4600P (0.006 mW Quasi-CW, 0.12 mW Pulsed)	-	-	-	-	-	-	-	-	-
Wavelength	Unmounted LEDs	Pigttailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy (Item # Prefix ^a)	Fiber-Coupled LEDs ^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options ^c	LED Arrays
Multi-Color, Broadband, and White LEDs										
455 nm i	-	-	-	MPRP1D2	MPRP1L4	-	-	-	-	-

(12.5%) and 640 nm				(275 mW Min)	(275 mW Min)					
572 nm and 625 nm	LEDGR (0.09 mW and 0.19 mW)	-	-	-	-	-	-	-	-	-
588 nm and 617 nm	LEDRY (0.09 mW and 0.19 mW)	-	-	-	-	-	-	-	-	-
467.5 nm, 525 nm, and 627.5 nm	LEDRGBE (5.8 mW, 6.2 mW, and 3.1 mW)	-	-	-	-	-	-	-	-	-
430 - 660 nm (White)	LEDWE-15 (13 mW)	-	-	-	-	-	-	-	-	-
	LEDW7E (15.0 mW)	-	-	-	-	-	-	-	-	-
	LEDW25E (15.0 mW)	-	-	-	-	-	-	-	-	-
6500 K (Cold White)				MCWHD5 (930 mW Min)	MCWHL7 (930 mW Min)	-		SOLIS-1C (3.3 W) ^f		
				MCWHD4 (990 mW Min)	MCWHL6 (990 mW Min)	MCWHL5 (340 mW) ^h				
				MCWHD3 (2350 mW Min)	MCWHL1 (2350 mW Min)	MCWHL6 (354 mW) ^e				
6200 K (Cold White)	-	-	-	-	-	-	MCWHF2 (27.0 mW)	-	-	-
5000 K (Cold White)	-	-	LEDW50 (110 mW)	-	-	-	-	-	-	-
4600 - 9000 K (Cold White)	-	-	-	-	-	-	-	-	-	LIUCWHA (250 mW)
4000 K (Warm White)	-	-	LEDW40 (115 mW)	-	-	-	MWWHF2 (23.1 mW)	-	-	-
3000 K (Warm White)	-	-	LEDW30 (100 mW)	MWWHD3 (2000 mW Min)	MWWHL4 (570 mW Min)	-	-	SOLIS-2C (3.2 W) ^f	-	-
					MWWHL1 (2000 mW Min)					
5700 K (Day Light White)	-	-	-	-	-	-	-	SOLIS-3C (3.5 W)	-	-
470 - 850 nm (Broadband)	-	-	-	MBB1D1 (70 mW Min)	MBB1L3 (70 mW Min)	-	MBB1F1 (1.2 mW)	-	-	-
770 nm, 860 nm, & 940 nm (Broadband)	-	-	-	MBB2D1 (740 mW ^d Min)	MBB2L1 (650 mW ^d Min)	-	-	-	-	-
					MBB2LP1 (740 mW ^d Min)					

- ~~^~~ These Collimated LEDs are compatible with the standard and epi-illumination ports on the following microscopes: Olympus BX/IX (Item # Suffix: -C1), Leica DMI (Item # Suffix: -C2), Zeiss Axioskop (Item # Suffix: -C4), and Nikon Eclipse (Bayonet Mount, Item # Suffix: -C5).
- ~~^~~ Typical power when used with MM Fiber with Ø400 µm core, 0.39 NA.
- ~~^~~ Our Multi-Wavelength LED Sources are available with select combinations of the LEDs at these wavelengths.
- ~~^~~ Measured at 25 °C
- ~~^~~ Typical power for LEDs with the Leica DMI collimation package (Item # Suffix: -C2).
- ~~^~~ Minimum power for the collimated output of these LEDs. The collimation lens is installed with each LED.
- ~~^~~ Typical power for LEDs with the Olympus BX and IX collimation package (Item # Suffix: -C1).
- ~~^~~ Typical power for LEDs with the Nikon Eclipse collimation package (Item # Suffix: -C5).
- ~~^~~ Percentage of LED intensity that emits in the blue portion of the spectrum, from 400 nm to 525 nm.

A

UV LEDs with Ball Lens (250 - 280 nm)

Item #	Info	Peak Wavelength ^a	Optical Power (Min) ^b	Spectral FWHM ^a	Viewing Half Angle ^a	Max DC Forward Current ^c	Lifetime (Min) ^{c,d}	Package ^e
LED250J		250 nm	1 mW	12 nm	7.5°	100 mA	>1000 hrs	TO-39
LED255J		255 nm	1 mW	12 nm	7.5°	100 mA	>1000 hrs	TO-39
LED260J		260 nm	1 mW	12 nm	7.5°	100 mA	>1000 hrs	TO-39
LED275J		275 nm	1 mW	12 nm	7.5°	100 mA	>1000 hrs	TO-39
LED280J		280 nm	1 mW	12 nm	7.5°	100 mA	>1000 hrs	TO-39

- ^aTypical values unless otherwise noted.
- ^bAt 100 mA unless otherwise noted.
- ^cTemperature: 25 °C
- ^dThe Lifetime is defined as the time required for the LED light output to drop by 50% when driven at 100 mA.
- ^eBecause these LEDs can generate up to 1 W of heat, we recommend that they are mounted in an S1LEDM LED mount with a passive HSLT2 heat sink lens tube.

Part Number	Description	Price	Availability
LED250J	250 nm LED with Ball Lens, 1 mW (Min), TO-39	\$399.69	5-8 Days
LED255J	255 nm LED with Ball Lens, 1 mW (Min), TO-39	\$355.84	Today
LED260J	260 nm LED with Ball Lens, 1 mW (Min), TO-39	\$367.02	5-8 Days
LED275J	275 nm LED with Ball Lens, 1 mW (Min), TO-39	\$364.71	Today
LED280J	280 nm LED with Ball Lens, 1 mW (Min), TO-39	\$323.76	Lead Time

A

LED Mounts

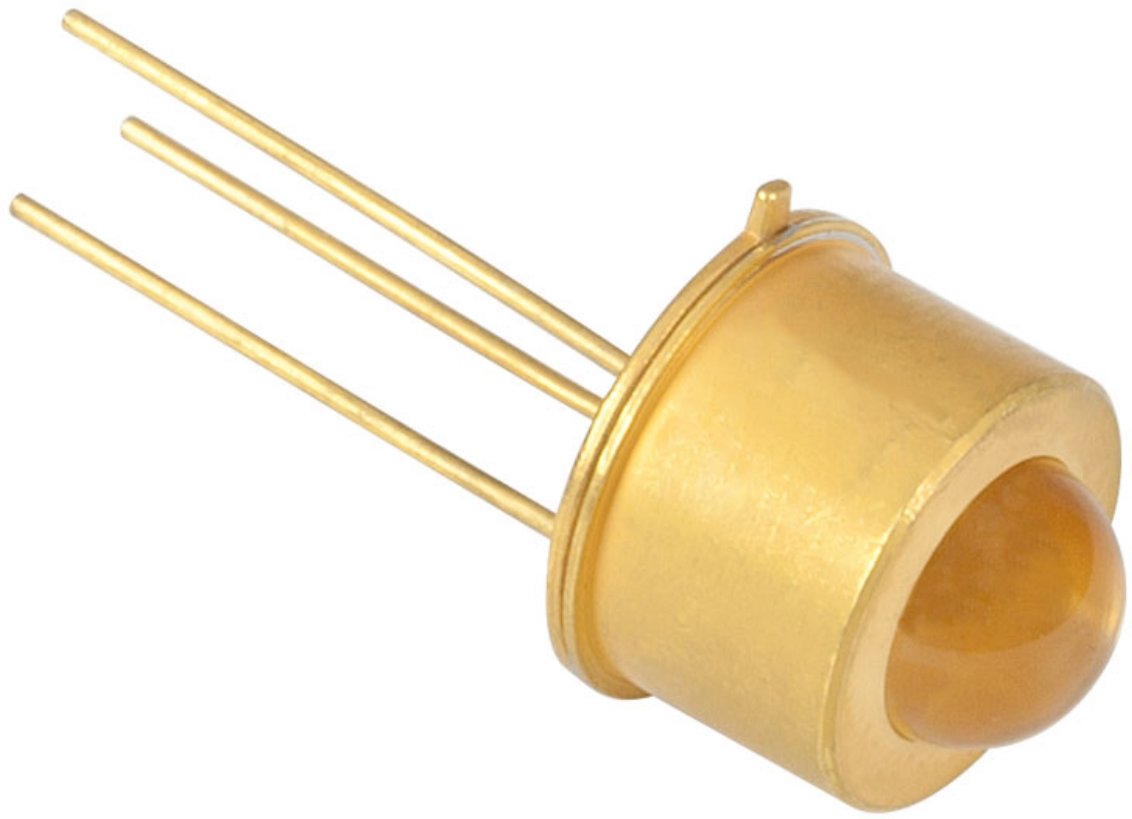
The S05LEDM and S1LEDM LED Mounts are SM05 (0.535"-40) and SM1 (1.035"-40) threaded, respectively. They are designed to hold any of Thorlabs' TO-18, TO-39, TO-46, or T1-3/4 packages using the included adapter rings. The external threading on these mounts allows them to be used in a wide variety of SM05- or SM1-compatible optomechanics.

To aid in threading the retaining ring into the mount or in threading the mount into a mating component, we recommend using our selection of spanner wrenches. The SPW801 Adjustable Spanner Wrench can be used to thread LED retaining rings into the mount and the mount into a mating component. Alternatively, the table to the right also lists the compatible fixed spanner wrench for each mount.

LED Mount Compatibility				
Item #	LED Package	External Mounting Threads	Compatible Spanner Wrenches	
			Mount	LED Retaining Ring
S05LEDM	TO-18, TO-39, TO-46, and T1-3/4 ^a	SM05 (0.535"-40)	SPW603	SPW301
			SPW801	
S1LEDM		SM1 (1.035"-40)	SPW909	SPW801

- ^aThe LEDRGBE uses a T-1 3/4 package, but is not compatible with the S05LEDM and S1LEDM, as the four pins prevent the retaining ring from holding the LED in place.

Part Number	Description	Price	Availability
S05LEDM	Customer Inspired! SM05-Threaded Mount for TO-18, TO-39, TO-46, or T-1 3/4 LEDs	\$34.63	5-8 Days
S1LEDM	SM1-Threaded Mount for TO-18, TO-39, TO-46, or T-1 3/4 LEDs	\$30.03	Today



Specifications

L-I-V

Far Field

Spectrum

Drawing

Specifications

Characteristic	MIN	TYP	MAX	UNIT
Power Dissipation	-	-	1	W
Operating Current (Continuous)	-	-	100	mA
Forward Voltage at 100 mA	-	8	10	V
Thermal Resistance, Junction to Case	-	37	-	°C/W
Optical Output Power at 100 mA	1	-	2	mW
Viewing Half Angle	-	7.5	-	°
Peak Wavelength	275	280	285	nm
Bandwidth (FWHM)	-	12	-	nm
Lifetime at 25 °C, 20mA	-	8000	-	hours
Lifetime at 25 °C, 100mA	1000	3000	-	hours

Absolute Maximum Ratings^a

Characteristic		
Reverse Voltage	1.0	V
DC Forward Current	110	mA
Operating Case Temperature	-5 to 55	°C
Storage Temperature	-40 to 100	°C

a. Absolute Maximum Rating specifications should never be exceeded. Operating beyond these conditions can seriously damage the LED.

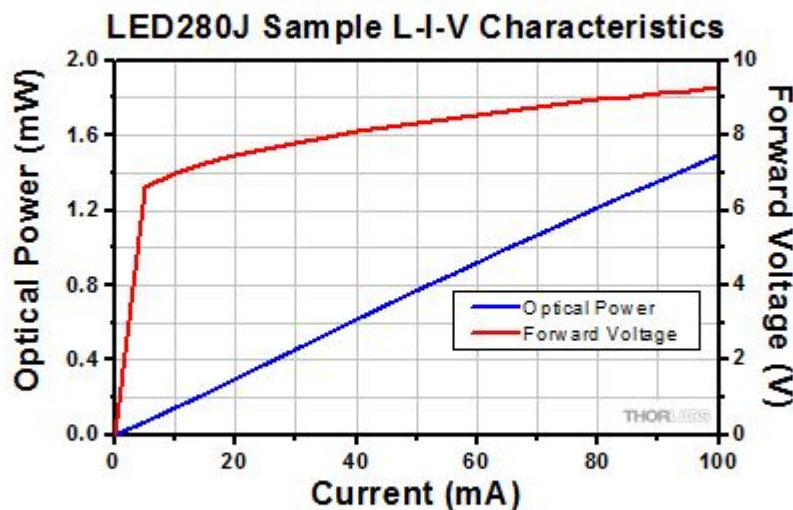
Specifications

L-I-V

Far Field

Spectrum

Drawing



The typical L-I-V characteristics are shown above, which were obtained with the case temperature held at 25 °C. This data is for one particular diode; the performance will vary from device to device. To view an Excel file with raw data from the sample LED shown above, please click [here](#).

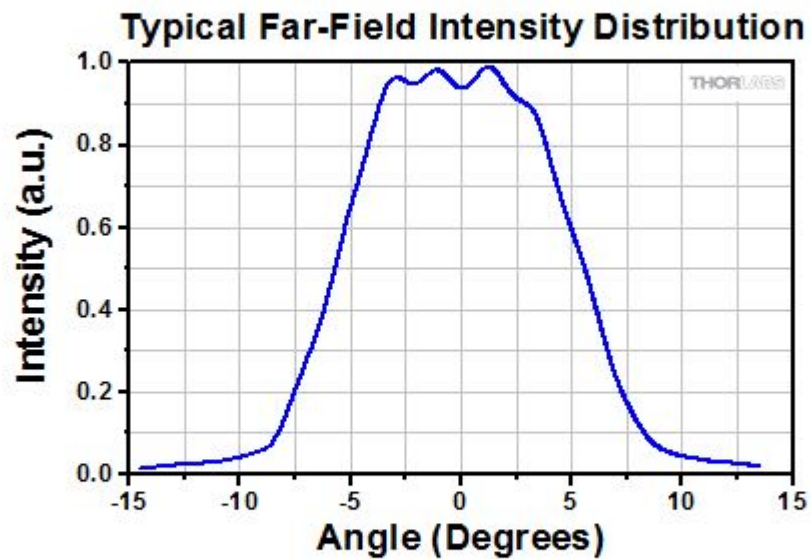
Specifications

L-I-V

Far Field

Spectrum

Drawing



The typical far field intensity distribution is shown above, which was recorded 25 mm from the LED with the case temperature held at 25 °C. This data is for one particular diode; the performance will vary from device to device. To view an Excel file with raw data from the sample LED shown above, please click [here](#).

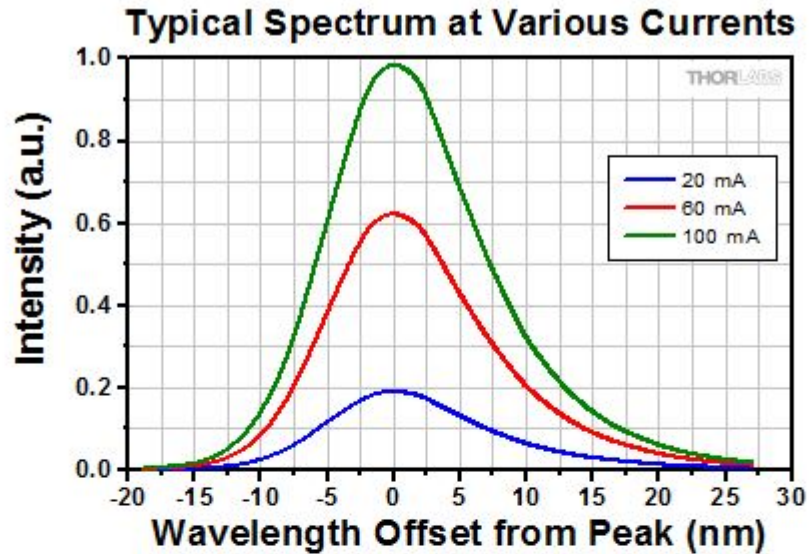
Specifications

L-I-V

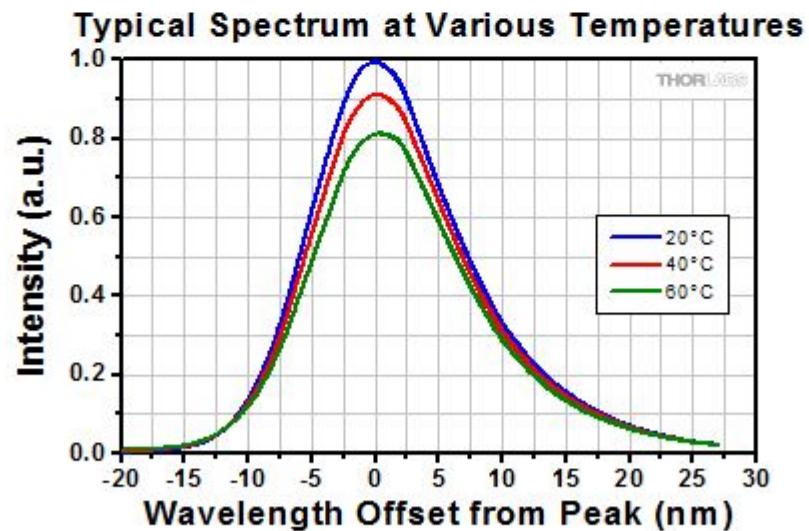
Far Field

Spectrum

Drawing



Typical spectra are shown above, all of which were obtained with the case temperature held at 25 °C.



Typical spectra are shown above for a variety of temperatures, all of which were obtained with a pulsed driving current of 100 mA. This data is for one particular diode; the performance will vary from device to device. To view an Excel file with raw data from the sample LED shown above, please click [here](#).

Specifications

L-I-V

Far Field

Spectrum

Drawing

