

S8058 - August 21, 2015

Item # S8058 was discontinued on August 21, 2015. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

LASER DIODE TOOLS AND ACCESSORIES

- ▶ **Sockets for Laser Diodes**
- ▶ **Strain Relief Provides Safe and Convenient Access to Laser Diodes**
- ▶ **Hand-Held Can Remover**



SR9A



S038S
Ø3.8 mm LD



S8060
Ø9.0 mm LD



S8060-4
Ø9.0 mm LD



S7060R
Ø5.6 mm LD



WR1

Designed to Remove Cans from Standard Laser Diode Packages

[Hide Overview](#)

OVERVIEW

Thorlabs offers a versatile range of accessories for convenient integration of laser diodes into functional systems. These laser diode sockets are ideal for OEM-type implementations and are compatible with our selection of Ø3.8 mm, Ø5.6 mm, Ø9 mm, and TO-5 laser diode packages. Our large selection of strain-relieved assemblies provides a safe and convenient method of connecting your Ø5.6 mm to Ø9 mm laser diodes to our line of Laser Diode Drivers.

Thorlabs also offers a hand-held diode can opener (WR1) designed to remove the cap from TO-style diode packages. Removing the cap from the diode package allows for closer access to the actual laser chip and is beneficial when the entrance windows are adversely impacting an optical signal with etalon effects or wavelength filtering.

Socket Selection Guide

Laser Diodes
Light Emitting Diodes
Photodiodes

[Hide Sockets for Laser Diodes](#)

Sockets for Laser Diodes

- ▶ Sockets Compatible with Ø3.8 mm, Ø5.6 mm, Ø9 mm, or TO-5 Can Laser Diodes
- ▶ Models Available with 3 or 4 Gold-Plated Beryllium Copper (BeCu) Contacts

Thorlabs offers a range of laser diode sockets that provide compatibility with our wide selection of Ø3.8 mm, Ø5.6 mm, Ø9 mm, and TO-5 Can laser diode packages. These sockets have gold-plated BeCu contacts and meet RoHS compliance. The S8058, S8060, and S8060-4 sockets have a polarization dot on the top of the package (see drawings below for more information). Colors vary by lot and may be white, off white, black, or tan.

Item #	S038S	S7060R	S8058	S8060	S8060-4	
Photo (Click to Enlarge)						
Material	Beryllium Copper (BeCu)					
Insulator	FR-4		Teflon			
Compatible Lead Diameters	0.008" - 0.014" (0.20 mm - 0.36 mm)		0.016" - 0.020" (0.41 - 0.51 mm)			
Compatible Lead Lengths	≤0.09" (2.27 mm)		≤0.15" (3.8 mm)			
Outer Diameter	0.153" (3.9 mm)	0.20" (5.1 mm)	0.406" (10.3 mm)	0.25" (6.4 mm)	0.25" (6.4 mm)	
Substrate Thickness	0.093" (2.4 mm)	0.062" (1.6 mm)	0.165" (4.2 mm)	0.19" (4.8 mm)	0.19" (4.8 mm)	
Drawing (Click for Details)						
Compatibility						
Laser Diodes	Ø3.8 mm	✓	x	x	x	x
	Ø5.6 mm	x	✓	x	o	o
	Ø9.0 mm	x	x	x	✓	✓
TO Can Packages	TO-5	x	x	✓	x	x
	TO-18	x	x	x	o	o
	TO-46	x	x	x	o	o

- ✓ Fully Compatible
- o Not a Perfect Fit, but Functional
- x Not Compatible

Part Number	Description	Price	Availability
S038S	Laser Diode Socket for Ø3.8 mm Laser, 3 Pin	\$3.80	Today
S7060R	Laser Diode Socket for Ø5.6 mm Laser, 3 Pin	\$5.35 Volume Pricing Available	Today
S8058	Laser Diode Socket for TO-5 Package, 3 Pin	\$9.60	3-5 Days
S8060	Laser Diode Socket for Ø9 mm Laser, 3 Pin	\$6.70 Volume Pricing Available	Today
S8060-4	Laser Diode Socket for Ø9 mm Laser, 4 Pin	\$7.30	Today

[Hide ESD Protection and Strain Relief](#)

ESD Protection and Strain Relief



- ▶ Includes Laser Socket and 3 Feet (0.91 m) of Shielded Cable
- ▶ External 13/32"-40 Threads for Compatibility with Laser Diode Collimation and Focusing Tubes and Laser Diode Cage Plate Mounts
- ▶ Includes Clamping and Reverse Protection Diodes to Suppress ESD
- ▶ Available with DB9 Connector for Mating Directly with LDC200C Series Laser Controllers

These strain relief and ESD protection products offer a convenient means of connecting a Ø5.6 mm or Ø9 mm laser diode to many of Thorlabs' laser diode controllers. Each model comes with a laser socket mounted to a small printed circuit board (PCB). The PCB contains a Schottky diode to clamp any reverse voltages that might appear across the laser diode, as well as a Zener diode to shunt any excessive voltages or ESD away from the diode.

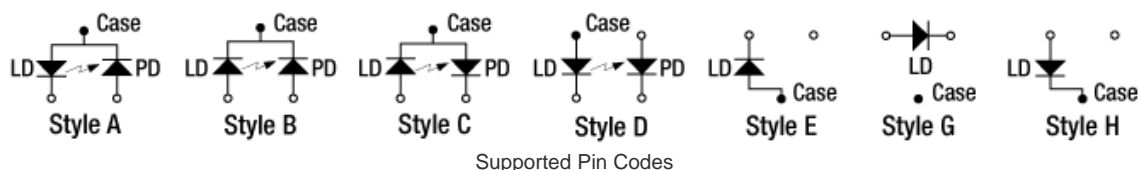
Each model corresponds to one or more of the standard Pin Styles for laser diodes (see the diagram below) and is compatible with our Laser Diode Collimation and Focusing Tubes and Laser Diode Cage Plate Mounts. SR9 models are designed for laser diodes with forward voltages up to 3.3 V, while SR9H models are designed for laser diodes with forward voltages up to 7.5 V. Each strain relief is available with or without

Item #	Supported Pin Style	Max LD Forward Voltage
SR9A	A and E	3.3 V
SR9B	B and H	
SR9C	C and H	
SR9D	D	
SR9F	F and G	
SR9HA	A and E	7.5 V
SR9HB	B and H	
SR9HF	F and G	

Note: A -DB9 at the end of the part number indicates a DB9 connector. Otherwise, the end of the cable is terminated with bare wires.

a DB9 connector. Models with item #'s that end in -DB9 are pin compatible with many of our Laser Diode Controllers (see the strain relief cable and controller pin diagrams to determine compatibility).

Note: These cables are not designed to provide any temperature regulation. More information on temperature regulating a laser diode is provided in the Laser Diode Tutorial.



Part Number	Description	Price	Availability
SR9A	ESD Protection and Strain Relief Cable, Pin Codes A and E, 3.3 V	\$49.00	Today
SR9A-DB9	ESD Protection and Strain Relief Cable, Pin Codes A and E, 3.3 V, with DB9	\$52.00	Today
SR9B	ESD Protection and Strain Relief Cable, Pin Codes B and H, 3.3 V	\$49.00	Today
SR9B-DB9	ESD Protection and Strain Relief Cable, Pin Codes B and H, 3.3 V, with DB9	\$52.00	Today
SR9C	ESD Protection and Strain Relief Cable, Pin Codes C and H, 3.3 V	\$49.00	Today
SR9C-DB9	ESD Protection and Strain Relief Cable, Pin Codes C and H, 3.3 V, with DB9	\$52.00	Today
SR9D	ESD Protection and Strain Relief Cable, Pin Code D, 3.3 V	\$49.00	Today
SR9D-DB9	ESD Protection and Strain Relief Cable, Pin Code D, 3.3 V, with DB9	\$52.00	Today
SR9F	NEW! ESD Protection and Strain Relief Cable, Pin Codes F and G, 3.3 V	\$49.00	3-5 Days
SR9F-DB9	NEW! ESD Protection and Strain Relief Cable, Pin Codes F and G, 3.3 V, with DB9	\$52.00	Today
SR9HA	Customer Inspired!ESD Protection and Strain Relief Cable, Pin Codes A and E, 7.5 V	\$49.00	Today
SR9HA-DB9	Customer Inspired!ESD Protection and Strain Relief Cable, Pin Codes A and E, 7.5 V, with DB9	\$52.00	Today
SR9HB	Customer Inspired!ESD Protection and Strain Relief Cable, Pin Codes B and H, 7.5 V	\$49.00	Today
SR9HB-DB9	Customer Inspired!ESD Protection and Strain Relief Cable, Pin Codes B and H, 7.5 V, with DB9	\$52.00	Today
SR9HF	NEW! ESD Protection and Strain Relief Cable, Pin Codes F and G, 7.5 V	\$49.00	Today
SR9HF-DB9	NEW! ESD Protection and Strain Relief Cable, Pin Codes F and G, 7.5 V, with DB9	\$52.00	Today

[Hide Can Opener for Laser Diodes and Photodiodes](#)

Can Opener for Laser Diodes and Photodiodes



- ▶ Ideal for: Ø2 mm through Ø24 mm Laser Diode Packages
- ▶ Compatible with TO-3, TO-5, TO-8, TO-18, TO-39, and TO-46 Packages



[Click to Enlarge](#)

The WR1 is a hand-held device designed to remove the cans from standard laser packages. Many applications, such as fiber pigtailling, can be optimized by having closer access to the laser chip.

Operation is as simple as placing a diode onto the two rollers at the front of the device, lightly applying pressure with the rubber covered grips, and turning the blade actuator (as shown in the image to the right). The precision ground, hardened steel blade will easily cut through the wall of the diode can, safely removing it. For packages greater than 20 mm (0.8") in diameter, the rollers must be removed and reinstalled in their outer mounting positions using a 5/64" (2 mm) hex key.

The WR1 is also compatible with any photodiodes and LEDs packaged in one of the TO can sizes listed above.

Part Number	Description	Price	Availability
WR1	Can Opener for Laser Diodes	\$131.60	Today

Visit the [Laser Diode Tools and Accessories](#) page for pricing and availability information:

https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=302