

## Data Sheets

### [180mW 650nm Laser Diode Module](#)



Sony Laser Diodes :

[SLD1236VL](#) 100 pcs Pack \$1,200

[SLD1239JL-54L](#) 100 pcs Pack \$1,400

[Sharp-GH0780MA2C](#)

### [eBay Shop.](#)

**By bidding you AGREE and ACCEPT:**

**You Are over 18 and know the potential hazards inherent in high power laser equipment.**

**You WILL use this device in a safe and sane manner for a legal purpose**

**You Accept this item as a COMPONENT for integration in a system of YOUR OWN design and will hold the SELLER LEGALLY harmless from any and all LIABILITY**

**You are buying A LOT QTY= 1 LASER DIODE MODULE FOR YOUR BID**

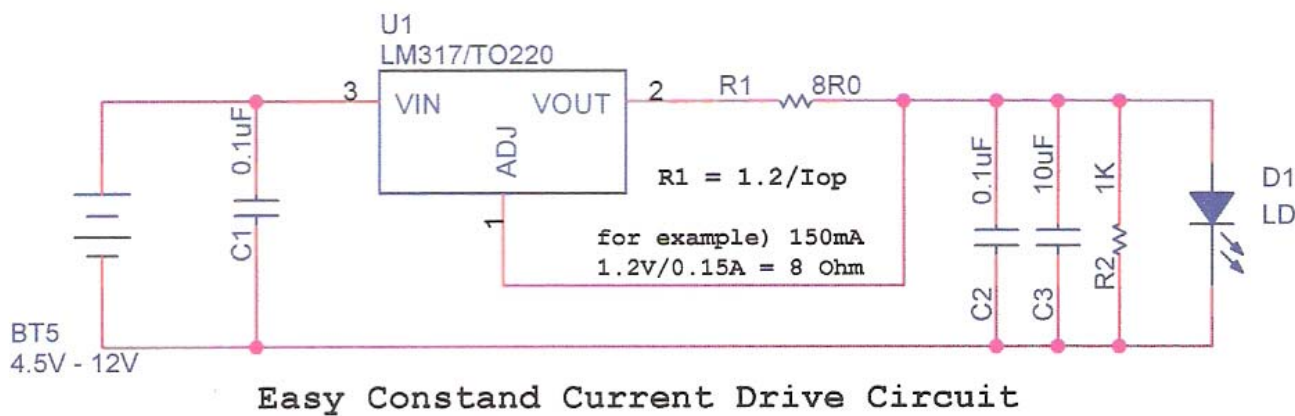
**You know the electronic safety precautions necessary with this item and therefore accept it AS IT IS as an EXPERIMENTAL COMPONENT without warranty.**

### [For Korean](#)

#### **Ex) Constant Current Laser Diode Drive**

**For this circuit, must not connect Laser Diode After Power On(Connect before Power On).**

**For 150mW Blue-Violet 405nm battery voltage must over 8.5V because this diode need about 5.25V(105mW : 11 or 12 ohm).**



#### **Ex) Battery or Constant Voltage Laser Drive Resistance calculation :**

$$R = (V_{bat} - V_f) / I$$

where R : Resistance(ohm)

Vbat : Battery or power supply voltage(Volt)

$V_f$  : Laser Diode forward voltage drop from datasheet (Volt)

$I$  : Laser Diode drive current from datasheet (Ampere)

For example :

SLD1236VL  $V_{op}$  2.8V(2.5V to 3V),  $I_{op}$  140mA(130 to 150mA) at 80mW, use 2 AA Battery(3.3V for new battery)

$R = (3.3 - 2.8) / 0.14$  approximation 3.57 Ohm

Can use general Value 3.3 or 3.9 Ohm.

For 150mW blue-violet  $V_{op} = 5.25V$ (about 5V),  $I_{op} = 105mA$  at 90-110mW, use 4 AA Battery(6.5V for new battery)

$R = (6.5 - 5.25) / 0.105 = 11.9$  ohm (approximation 12 Ohm)

Approximate(easy calculate) Laser Diode Power consumption :

$P = VI$

where  $V$  : Diode forward Voltage

>  $I$  : Diode Current

example)

$2.8 * 0.14 = 0.392$  Watt

Can use 1/2 W one resistor or 1/4W two resistor parallel or serial connection

**High power laser pointer is very dangerous, please use it safe and sane manner for a legal purpose.**

154mA(168mA for SLD1239JL) switch mode constant current Driver for SLD1236VL, 3.2-5.1V input(146mA for SHARP infrared)

This board can insert to blank housing.

> Size 16 x 10 mm- Board pattern can be change.

Pin from left up to down; +V Input, GND, -Disable(default enabled)

Right up to down; +V output, GND.



156mA(167mA for SLD1239JL, 104mA for 150mW blue-violet) output

switch mode constant current driver for SLD1236VL, 6-15V input(8.5-15V for blue-violet).

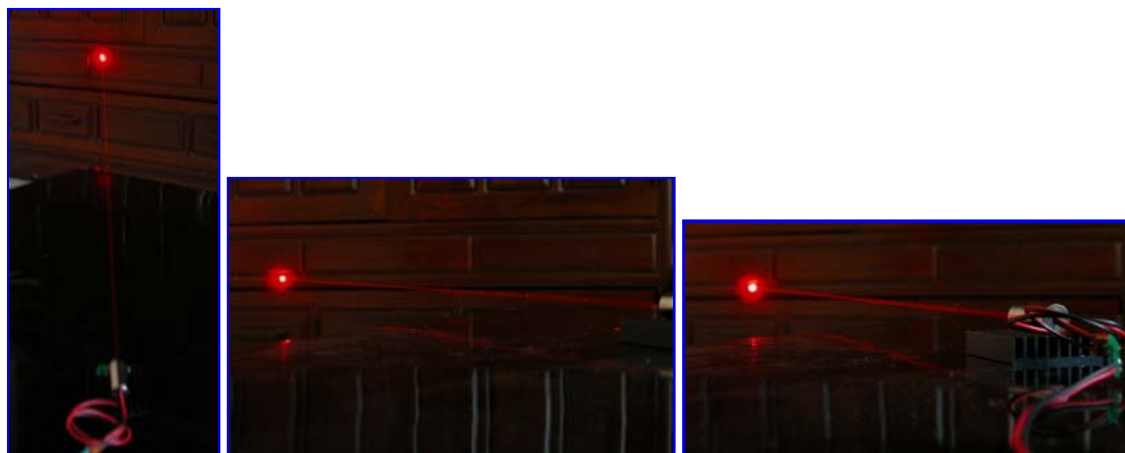
Also can order other constant current value from 100mA to 1.5 A- Ask before order(can set to near order value-fixed).

Switching power supply for this driver(no casing like this module)

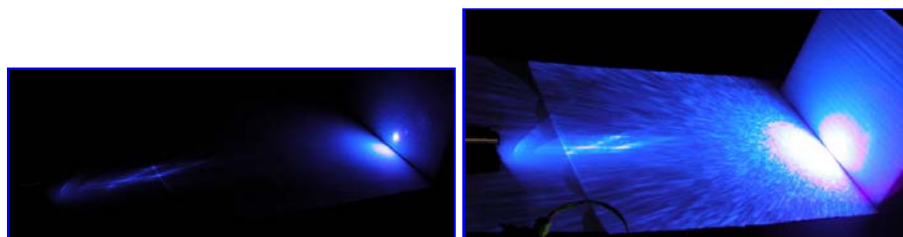


**Laser Beam From SLD1239JL Module**

Drive : Constant Voltage 2.85V



60mW Blue Violet Laser Diode



High power laser pointer is very dangerous, please use it safe and sane manner for a legal purpose.

Cigarette fire(light) - From Left, Start...Before Fire...After Fire

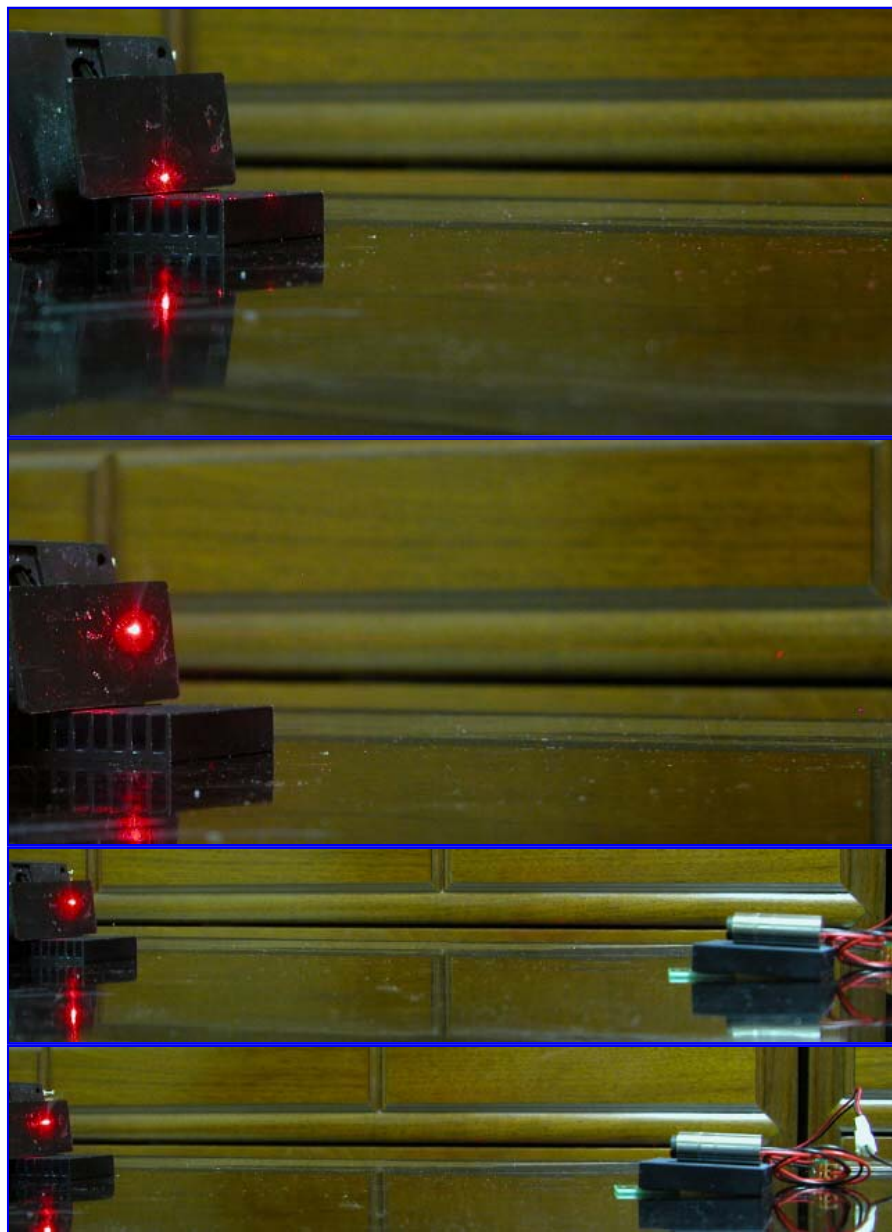


Punch IC Reel Film - From before punch to after punch





Plastic - Compare White Marks(After fire) and Smoke



**High power laser pointer is very dangerous, please use it safe and sane manner for a legal purpose.**

Personal build Laser Pointer, Use 140mW SLD1234VL Laser Diode

**New version.**

Can purchase 180mW Laser Diode Module which personally built and fit in penlight.(\$100 include penlight, module, shipping)  
You need only change bulb head to laser module head and need 2 AAA battery.

