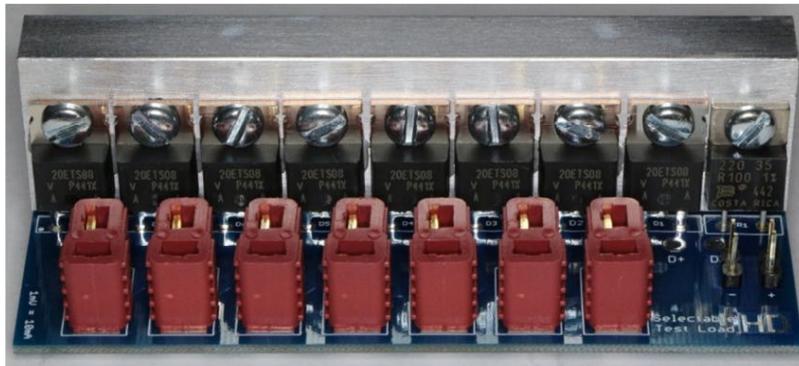


Selectable Test Load HD



Description:

This Heavy Duty test load was designed to test the capabilities of high output drivers in excess of 20+ Amps, but can be also used for lower current drivers as well. The heat sink helps cool the diodes and resistor from the heat generated from testing as well as provides longer test durations when analyzing driver output behavior and characteristics. If desired, the heat sink can be easily swapped out for a much larger one for more rigorous testing.

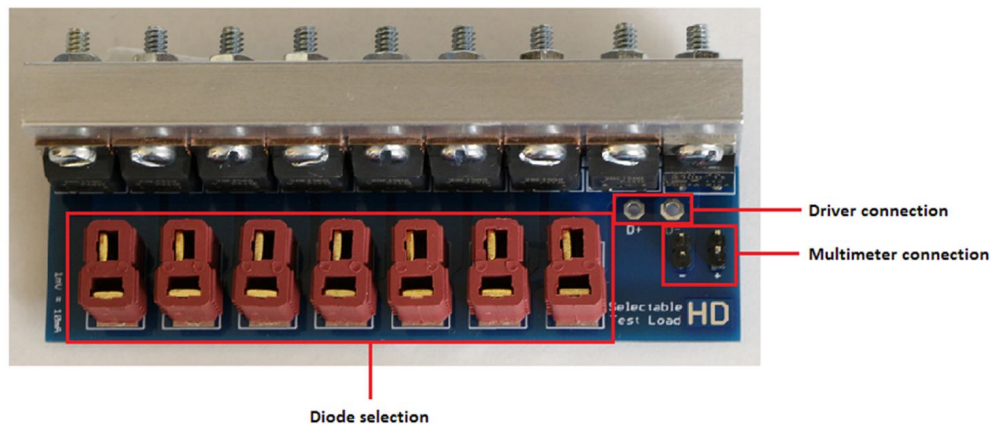
Features:

- 2oz. copper thickness layers
- 30 Amp capable diode selector pins (deans connectors)
- Radial mount components for easy heat sinking
- 20 Amp diodes (electrically isolated thermal pad)
- 100mΩ resistor for lower wattage output at high currents (electrically isolated thermal pad)

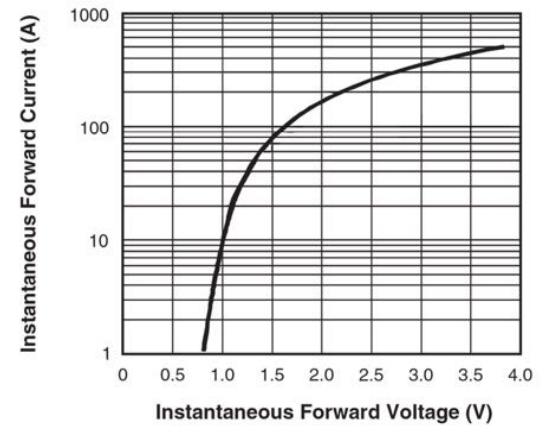
Applications:

- Laser driver testing
- LED driver testing

Reference data:



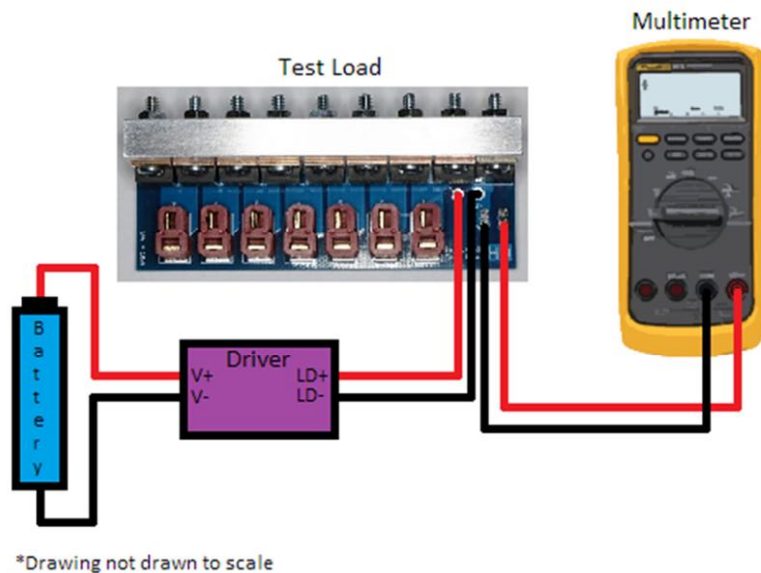
| | # of diodes | | | | | | | |
|-----|-------------|------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0.5 | 0.75 | 1.50 | 2.25 | 3.00 | 3.75 | 4.50 | 5.25 | 6.00 |
| 1 | 0.80 | 1.60 | 2.40 | 3.20 | 4.00 | 4.80 | 5.60 | 6.40 |
| 2 | 0.85 | 1.70 | 2.55 | 3.40 | 4.25 | 5.10 | 5.95 | 6.80 |
| 3 | 0.90 | 1.80 | 2.70 | 3.60 | 4.50 | 5.40 | 6.30 | 7.20 |
| 4 | 0.93 | 1.86 | 2.79 | 3.72 | 4.65 | 5.58 | 6.51 | 7.44 |
| 5 | 0.95 | 1.90 | 2.85 | 3.80 | 4.75 | 5.70 | 6.65 | 7.60 |
| 6 | 0.97 | 1.94 | 2.91 | 3.88 | 4.85 | 5.82 | 6.79 | 7.76 |
| 7 | 0.98 | 1.96 | 2.94 | 3.92 | 4.90 | 5.88 | 6.86 | 7.84 |
| 8 | 0.99 | 1.98 | 2.97 | 3.96 | 4.95 | 5.94 | 6.93 | 7.92 |
| 9 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 |
| 10 | 1.03 | 2.06 | 3.09 | 4.12 | 5.15 | 6.18 | 7.21 | 8.24 |
| 11 | 1.05 | 2.10 | 3.15 | 4.20 | 5.25 | 6.30 | 7.35 | 8.40 |
| 12 | 1.07 | 2.14 | 3.21 | 4.28 | 5.35 | 6.42 | 7.49 | 8.56 |
| 13 | 1.09 | 2.18 | 3.27 | 4.36 | 5.45 | 6.54 | 7.63 | 8.72 |
| 14 | 1.11 | 2.22 | 3.33 | 4.44 | 5.55 | 6.66 | 7.77 | 8.88 |
| 15 | 1.13 | 2.26 | 3.39 | 4.52 | 5.65 | 6.78 | 7.91 | 9.04 |
| 16 | 1.15 | 2.30 | 3.45 | 4.60 | 5.75 | 6.90 | 8.05 | 9.20 |
| 17 | 1.17 | 2.34 | 3.51 | 4.68 | 5.85 | 7.02 | 8.19 | 9.36 |
| 18 | 1.18 | 2.36 | 3.54 | 4.72 | 5.90 | 7.08 | 8.26 | 9.44 |
| 19 | 1.19 | 2.38 | 3.57 | 4.76 | 5.95 | 7.14 | 8.33 | 9.52 |
| 20 | 1.20 | 2.40 | 3.60 | 4.80 | 6.00 | 7.20 | 8.40 | 9.60 |



[note #1] Estimated values from data sheet. **Table does not include resistor voltage drop out.** To calculate resistor voltage drop out use $V=IR$ with R being .1 Ω

[note #2] To use all 8 diodes, do not place jumper pin.

How to use the Selectable Test Load HD:



1. Choose the number of diodes needed to simulate your laser diode on the numbered jumper pins (*If you don't know, refer to table above.*)
2. Hook up your driver to the test load on the designated pin holes.
3. Place your multimeter on designated pins and turn it on and set it to read in DC volts.
4. Attach the battery or batteries to the driver and see what the multimeter reads.
5. 1 mV = 10 mA due to 100m Ω resistor
6. For example, if the multimeter shows .250mV, just move decimal over or multiply by 10x to get actual reading of 2.50A (e.g. .050mV = 500mA)