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**Project:**  
High Voltage Current Sink  
25ma – 300+ma  
25 to 400 VDC

**Purpose:**  
To create a simple variable current sink for simulating hi power loads for power supplies. Can be used to test performance and simulate instantaneous loads.

**NOTES:**

1. Be sure to heat sink transistors.
2. Variable pot (T1) provides 0 – 100 ma draw.
3. Fixed Bias (T2) Provides switchable draw from 25ma to 250+ma depending on the switch position and supply voltage (B+).
4. Sections can be combined for higher current. Always bring up on Variac slowly. Over-voltage protection for transistors is not provided.
5. You can do a more elegant design using Op-Amps, but I had these parts available, so this is it.
6. You should be able to sub T1 with a MJE340, but make sure to use a large copper heat sink. T2 is an old transistor, and not available anymore, so you are on your own to find a substitute. Make sure high Base current is supported.

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