Agency Requirements for Power Distribution on 1394

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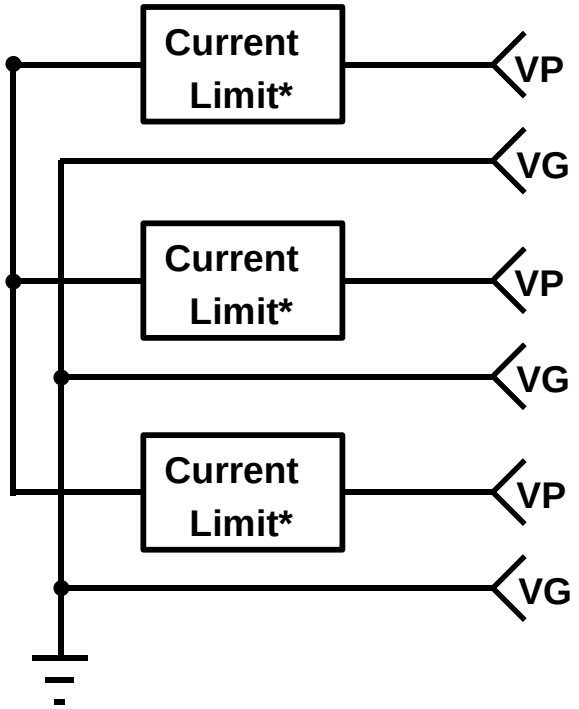
- According to IEC950, ‘inherently limited’ supplies must limit output current on user accessible connections wire to 8A if voltage < 20V and to 100 VA if voltage >20V
- UL requires that protection must limit short circuit current to less than 8A within 60 sec.
- For supplies that are not ‘inherently limited’ limit is 5A if voltage < 20V and 100VA if voltage > 20.

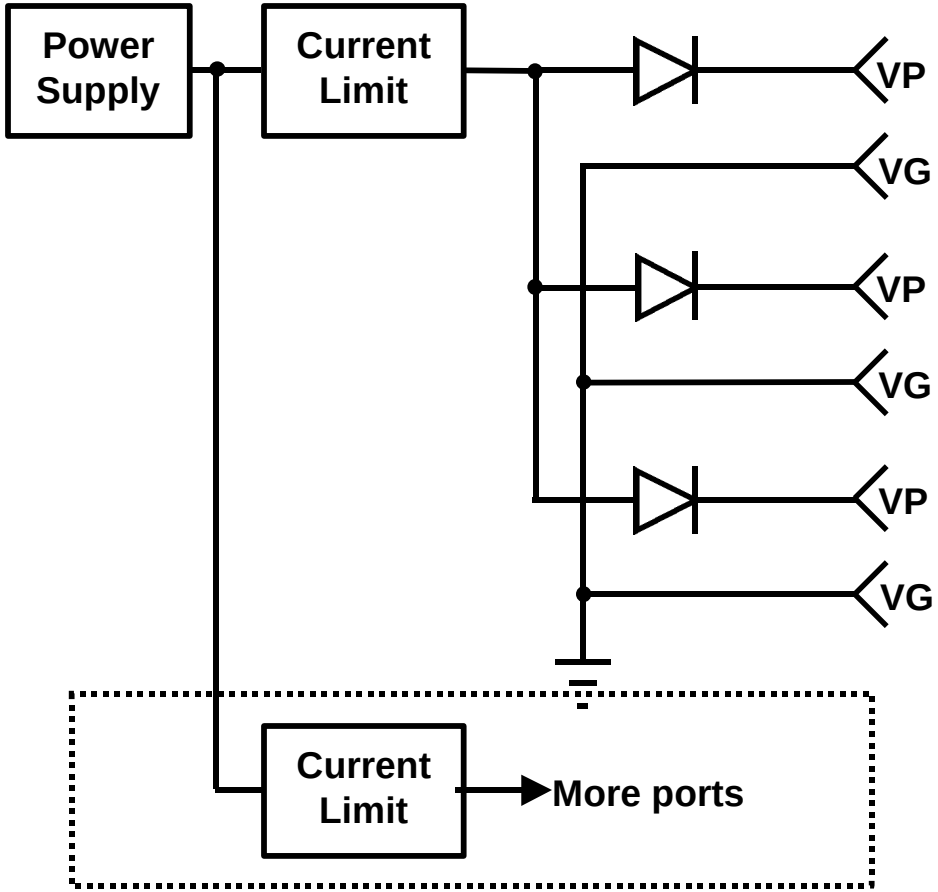


***Pass 1.5A, trip at 3.0A**

Self powered node

Rules for self powered node

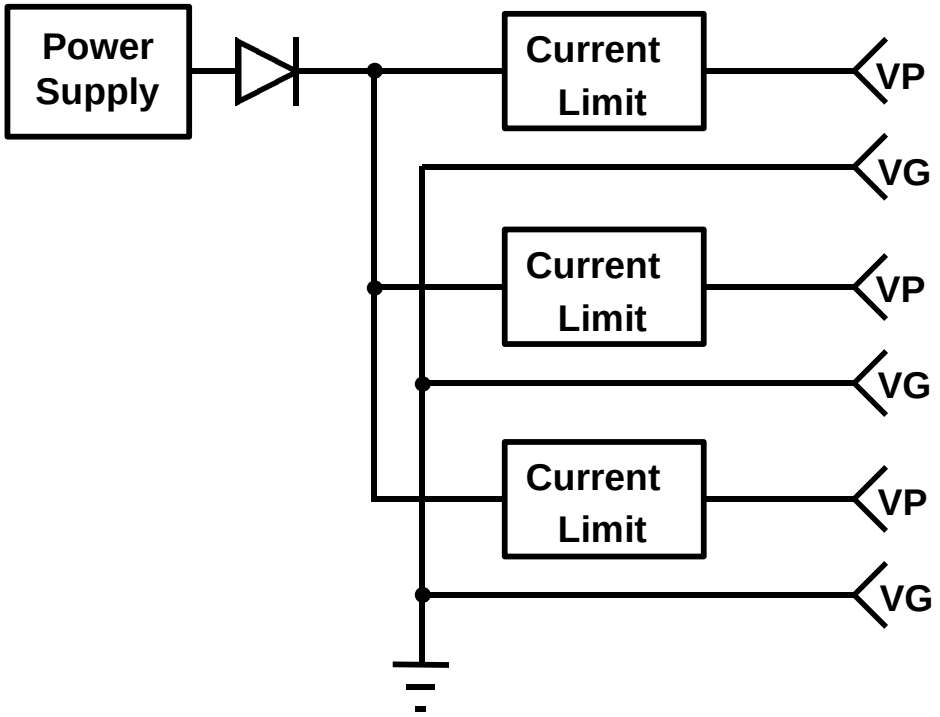
- Self powered node than can sum two power sources into a third output must have current limiting on each port
- Easiest current limiting is poly fuse that will pass 1.5A and trip at 3.0A



Power supply with diode per port

Rules for supply with diode per port

- Maximum current out any node must be < 8A or 100 VA
- Examples
  - If supply is 20V and 1.5A per port, then have up to 3 ports on each current limiting device (as shown on previous foil.)
  - If supply is 12V and 1.5A per port, then can can have 5 ports on each current limiting device.



Supply with single diode isolation

Rules for supply with single diode isolation

- If only one port, then only need single current limiting device
- If more than two ports, then need current limiting device on each port
  - Because the node is also providing power, this is equivalent to three node, self powered device