Diode Protection for Series-Connected DC Power Supplies.

Example: 2 series-connected RLT402DE1224 to make 48V *(or 24V)*

http://www.casa.co.nz

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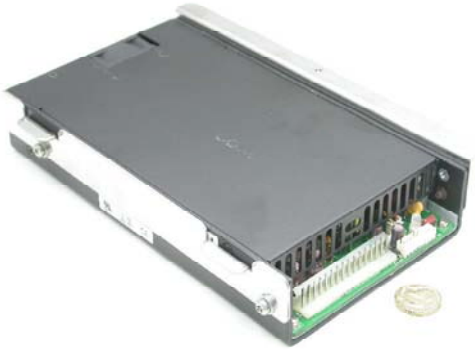

General Data

Example of 2 (matched/identical) switch mode supplies serial-connected to get additional (or alternative) voltages.

Note - At least one of the supplies **must** have a floating (fully-isolated) output. It may be prudent to set the over-current trip point of both power supplies to the same maximum-current.

The diodes must be rated to take the full rated current of the supply to prevent destruction of a supply should it be tripped off due to over current or simply switched off leaving the still running supply to reverse polarise the now idle supply.

Ideally the load should be activated after the supplies have been energised (in unison) and similarly the load should be deactivated before the supplies are shut down.

When mixing supplies of differing current ratings the lowest current sets the maximun allowable current of the combination.