

Split Power Supply Rectifier

By Tom's Bespoke Widgets

This device integrates a full bridge rectifier, capacitor bank and inrush limiting thermistors into an easy-to-use module. Low voltage AC power goes in one side, and DC comes out the other side. For best results a center tap transformer should be used, but a single-winding transformer can be used also (see the example wiring diagram). If low ripple is required, a voltage regulator should be placed after the output. If inrush limiting is not required, lower ripple and voltage drop can be achieved by bypassing the thermistors. A pair of solder jumpers are included on the back of the board for this purpose.



Absolute Maximum Ratings

Output Voltage (Positive Rail)	Maximum	25V
Output Voltage (Negative Rail)	Minimum	-25V
Output Current (Each Rail)	Maximum	3A

Electrical Characteristics

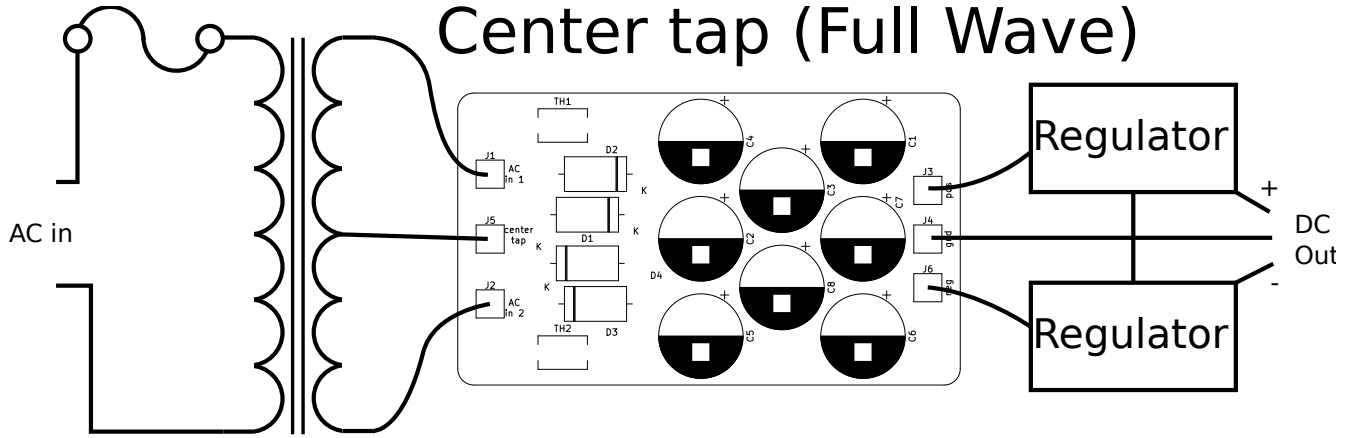
Ripple	Measured at 15V, 1.5A	About 0.5Vpp
Voltage Drop	Measured at 15V, 1.5A	About 3.5V

Mechanical Characteristics

Width	1.81 inch
Length	3.11 inch
Height	0.95 inch
Distance Between Mounting Holes (Width)	1.4 inch
Distance Between Mounting Holes (Length)	2.7 inch
Recommended Fastener	M3 machine screws

Example Wiring Diagram

Center tap (Full Wave)



No Center Tap (Half Wave)

