



Barny Solar Charge Controller Board List of Parts

no.	References	Value	Description	QTY
1	C1,C2	100nf 50V	Non Polar Capacitor	2
2	D1	10A10	Rectifier diode	1
3	D3	LED_RED	LED Red 5mm	1
4	D4	12V Z	12v Zener	1
5	D5	5.1V Z	5v1 zener	1
6	D6	LED_GREEN	LED green 5mm	1
7	J1	Load Connector	LED Light	1
8	J2	12V BATTERY	12v Battery connector	1
9	J3	SOLAR PANEL	Solar panel connector	1
10	Q1	IRFZ44	N-channel MOSFET	1
11	Q2	IRF9540	P-channel MOSFET	1
12	Q3,Q4	BC547	BC547 Transistor	2
13	R1	LDR	LDR 5mm	1
14	R2,R3,R9	15K	1/4w Resistor	3
15	R4	10K	1/4w Resistor	1
16	R5	100K	1/4w Resistor	1
17	R6	1k	1/4w Resistor	1
18	R7	47K	1/4w Resistor	1
19	R8,R12,R14	4K7	1/4w Resistor	3
20	R10	470R	1/4w Resistor	1
21	R11,R13	1K	1/4w Resistor	2
22	RV1**	100K	Load Preset	1
23	RV2*	50K	Charging Preset	1
24	U1	LM358	Op-amp ic	1

For More information please visit - vaspelectronics.com

Instructions

Connect solar panel first

* - Place a 1K Ω resistor at Battery Connector J2 and adjust RV2 to set charging voltage.

** - Put your finger to darken the LDR and adjust RV1 till the LED light turns on.