

Name:	Battery Protector, Basic	12VDC, UVLO, LOW, N-CH MOSFET
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Line #	PCB Part Label	Qty.	Value	Description	Kit Parts	Notes
1	R1	1	15K	Resistor, 15k Ohms, 1/8W 5% carbon film	Y	
2	R2	1	560k	Resistor, 560k Ohms, 1/8W 5% carbon film	Y	
3	R3, R5, R10, R11	4	100K	Resistor, 100k Ohms, 1/8W 5% carbon film	Y	
4	R4	1	330K	Resistor, 330k Ohms, 1/8W 5% carbon film	Y	
5	R6	1	47K	Resistor, 47k Ohms, 1/8W 5% carbon film	Y	
6	R7, R12	2	10K	Resistor, 10k Ohms, 1/8W 5% carbon film	Y	
7	R8	1	1.0M	Resistor, 1.0M Ohms, 1/8W 5% carbon film	Y	
8	R9	1	2.2K	Resistor, 2.2k Ohms, 1/8W 5% carbon film	Y	LED brightness
9	C1, C3	2	16V100	Capacitor, 16V 47-100uF, electrolytic, 0.1" spacing	Y	C1:input filter, C3:Vsense response
10	C2, C4, C5	3	104	Capacitor, 50V 0.1uF, ceramic, 0.2"	Y	
11	D1, D2, D6	3	diode	Diode, signal diode, 500mW, 1N4148 generic	Y	
12	D3, D7	2	6.2V Zener	Diode, 6.2V zener, 500mW, 1N5234B generic	Y	Vreference
13	IC1	1	LM258 Op-amp	IC, dual op-amp, LM258N generic	Y	
14	VR1, VR2	2	100K trimmer	Resistor, 100k variable, 3362, top/side adjust	Y	
15	VR3	1	1M trimmer	Resistor, 1M variable, 3362, top adjust	560k res.	fixed resistor 200k-1M
16	Q1	1	N-CH MOSFET	Discrete, N-CH MOSFET, TO-220	Y	load, UVLO
17	LED1	1	LED	Display, green, 3/5mm diffused, any type	5mm green	status indicator, Pin 1=+
18	PCB-PEBP2	1	PCB	PCB, Battery Protector, V2, PCB-PEBP	Y	Onstate BP PCB
19	JP1	1	wire	jumper, bare wire	N	SELECT, UV-G
20	WIRE1	-	user supply	Wire, 22AWG, red		
21	WIRE2	-	user supply	Wire, 20AWG, black		
22	WIRE3	-	user supply	Wire, 20AWG, blue		
23	HTSNK1	-	user supply	Heatsink, TO-220		
24	SCRW1	-	user supply	Hardware, screw, #4 x 1/4"		
25	NUT1	-	user supply	Hardware, nut, #4		
26	LW1	-	user supply	Hardware, lockwasher, #4		

See TECH CIR-BMBP2 Battery Protector for more information on setup.

Basic standard version: set VR1=CCW, VR2=CW

Set input shut-off V (UVLO, 11.4V). Wait >5s. Adj VR1 CW-> until LED trips (fast blinking).

Increase V for UVLO reset (~12.4V). VR3 sets ΔVreset. VR1/VR3 are dependent.

Set V for low flashing (12V). LED should not be flashing. Adj VR2 CCW-> until LED starts flashing.

