



Onstate
Technologies

Bill Of Material

Document:	
Revision:	1
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Name: CIR-BMBP-12V-1 Version: 1 Battery Protector, 12VDC, 10A N-MOSFET, basic model

Line #	Part	Qty.	Description	Digi-key Part #
1	R1	1	Resistor, 27k Ohms, 1/8W 5% carbon film	27KEBK-ND
2	R2	1	Resistor, 1.2M Ohms, 1/8W 5% carbon film	1.2MEBK-ND
3	R3, R5, R9, R10	3	Resistor, 100k Ohms, 1/8W 5% carbon film	100KEBK-ND
4	R4, R11, R12	3	Resistor, 330k Ohms, 1/8W 5% carbon film	330KEBK-ND
5	R6, R14	2	Resistor, 47k Ohms, 1/8W 5% carbon film	47KEBK-ND
6	R7	1	Resistor, 10k Ohms, 1/8W 5% carbon film	10KEBK-ND
7	R8	1	Resistor, 1.0M Ohms, 1/8W 5% carbon film	1.0MEBK-ND
8	R13	1	Resistor, 2.2k Ohms, 1/8W 5% carbon film	2.2KEBK-ND
9	R17	1	Resistor, bare jumper wire	ELE-RES-JMP-001
10	D1, D5, D7	3	Diode, 1N5234B, 6.2V zener, 500mW	1N5234B-TPCT-ND
11	D2, D3, D6	3	Diode, 1N4148, signal diode, 500mW	1N4148FS-ND
12	D4	1	Diode, 1N4002, general Si diode, 100V 1A	1N4002-TPMSCT-ND
13	IC1	1	IC, LM258 dual op-amp	LM258NOS-ND
14	VR1	2	Resistor, 500k variable, 306H, top adjust, inline	306HC504B-ND
15	VR2	1	Resistor, 100k variable, 306H, top adjust, inline	306HC104B-ND
16	C4, C5	2	Capacitor, 50V 0.1uF (104), ceramic 20%, 0.1" spacing	BC1160CT-ND
17	C1, C3	1	Capacitor, 35V 100uF, electrolytic, 0.1" spacing	P5165-ND
18	C2	1	Capacitor, 35V 10uF, electrolytic, 0.1" spacing	P5161-ND
19	Q1	1	Discrete, IRFZ44N, N-MOSFET, TO-22C	IRFZ44VPBF-ND
20	LED1	1	Display, LED, green 5mm 19mcd diffused	67-1098-ND
21	PCB	1	PCB, Battery Protector, V1	PCB-PEBP-001
22	Wire-Red	0.6	Wire, 18AWG, stranded, red, Common red, soldered to D4(+).	
23	Wire-Black	0.3	Wire, 18AWG, stranded, black, input: black	
24	Wire-Blue	0.3	Wire, 18AWG, stranded, blue, output	
25	HTSNK1	1	Heatsink, TO-220	
26	SCRW1	1	Hardware, screw, #4 x 1/4"	
27	NUT1	1	Hardware, nut, #4	
28	LW1	1	Hardware, lockwasher, #4	