

Onstate Technologies	Bill Of Materials		Document:	BOM CIR-SRD3-2
			Revision:	1
			Revision Date:	December 21, 2010
Name:	CIR-SRD3-2	Version: 1.0	Basic high power switching regulator, constant voltage, 2.5A.	

Item	Part:	Qty.	Part Code	Description:	Digikey Part #	Alternate part
1	IC1	1	LM2596T-AD	150kHz, 3A simple switcher regulator, TO-220	LM2596T-ADJ-ND	
2	D1	1	1N5822	3A Schottky diode	1N5822-TPMSCT-ND	1N4148DICT-ND
3	D2	1	1N5822	3A Schottky diode	1N5822-TPMSCT-ND	1N4148DICT-ND
4	D3	1	jumper	wire jumper, D3- to IC2 pin3		
5	L1	1	jumper	wire jumper		
6	L2	1	221	220uH inductor, JW Miller, 1A 6000-221K-RC	M8632-ND	RLB9012-221KL-ND
7	L3	1	221	220uH inductor, JW Miller, 1A 6000-221K-RC	M8632-ND	RLB9012-221KL-ND
8	C1 (optional)	1	104	50V 0.1uF multi-layer. cap. 0.2" spacing	478-3193-ND	
9	C2	1	105	63V 1uF mylar cap. 0.2" spacing	495-2470-ND	399-5447-1-ND, 478-3195-ND
10	C3	1	35V220	35V 220uF electrolytic cap, 0.2" spacing	P12411-ND	P12397-ND, P12413-ND
11	C4	1	35V220	35V 220uF electrolytic cap, 0.2" spacing	P12411-ND	P12397-ND
12	C5 (optional)	1	334	63V 0.33uF mylar cap. 0.2" spacing	495-2548-ND	399-5446-1-ND
13	C6	1	105	63V 1uF mylar cap. 0.2" spacing	495-2470-ND	399-5447-1-ND, 478-3195-ND
14	C7	1	103	50V 0.01uF multi-layer ceramic. cap. 0.2" spacing	478-4862-ND	
15	C8	1	35V220	35V 220uF electrolytic cap, 0.2" spacing	P12411-ND	P12397-ND, P12413-ND
16	C9	1	35V220	35V 220uF electrolytic cap, 0.2" spacing	P12411-ND	P12397-ND, P12413-ND
17	VR2	1	103	10k variable resistor, add wire to pins 2/3 bottom set VR2 for output voltage range, 10k=10.5-22.5V	3362R-103LF-ND	3362P-103LF-ND
18	R1	1	560k	560k 1/8W resistor	560KEBK-ND	
19	R2	1	1k	1k 1/8W resistor	1KEBK-ND	
20	R3	1	1k	1k 1/8W resistor	1KEBK-ND	
21	R4	1	7.5k	7.5k 1/8W resistor, R4+ to R3+ (close to C12) set R4 for minimum output voltage, R4/R3 ratio	7.5KEBK-ND	
22	R8	1	0R0	wire jumper		
23		1	heatsink	IC1 heatsink, TO-220, 0.5" COMPACT mount IC1 vertically with heatsink.	HS104-2-ND	HS104-1-ND, HS107-ND
24		1	hardware			
25		1	PCB	PCB-SRD3		