

## Bill Of Materials for PCpower 7segtm

### 40 Resistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
6	R1,R8,R17,R19, R26,R28	240K	Through Hole Resistor, 250 mW, $\pm 1\%$
6	R2,R7,R16,R18, R25,R27	5K9	SMD1206 250 mW, $\pm 1\%$
12	R3-R6,R12-R15, R23-R24,R37-R38	0.1	Through Hole Resistor, 0.1 ohm, SQ Series, 5 W, $\pm 5\%$ , Axial Leaded
4	R9-R10,R20,R29	12K	Through Hole Resistor, 250 mW, $\pm 1\%$
4	R21-R22,R30-R31	680	Through Hole Resistor, 250 mW, $\pm 1\%$
1	R32	0.1	METAL FILM RESISTOR,1W, 0,1 Ohm 1%
2	R33,R36	27K	Through Hole Resistor, 250 mW, $\pm 1\%$
2	R34-R35	2K7	Through Hole Resistor, 250 mW, $\pm 1\%$
3	R39,R41-R42	24K	Through Hole Resistor, 250 mW, $\pm 1\%$

Sub-totals:

### 14 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	U1	IH0524S	Isolated Board Mount DC/DC Converter, ITE, 2 Output, 2 W, 24 V, 42 mA, -24 V
5	U2-U5,U13	OPA551	Operational Amplifier, 1 Amplifier, 3 MHz, 15 V/ $\mu$ s, 8V to 60V, $\pm 4$ V to $\pm 30$ V, SOIC, 8 Pins
2	U6-U7	LM393	Dual, General Purpose, Differential Comparator
2	U8-U9	7474	Dual Positive-Edge-Triggered D-Type Flip-Flops With Clear And Preset
1	U10	7420	Dual 4-Input Positive-NAND Gates
3	U11-U12,U15	7SEGM VOLTMETER	

Sub-totals:

### 1 Transistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	Q1	IRL2505	55V, 104A @ 25°C, 200W, Single N-Channel HEXFET Power MOSFET in a TO-220AB package

Sub-totals:

### 4 Diodes

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
4	D1-D4	LED-RED	LED 5MM(Red)

Sub-totals:

### 20 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
3	FU1-FU3	20A	Fuse 5x20mm 16A
1	FU4	1A	Fuse 5x20mm 16A
8	J1-J8	Banana Connector, 4mm, Jack, Panel Mount, 30A RED	Single pin terminal
1	RV2	10K	Rotary Potentiometer, Carbon, 10 kohm, 1 Turns, Linear, 50 mW, $\pm 20\%$ , PTV09A Series
1	RV5	4K7	Trimmer Potentiometer, 4k7, 1 Turns, Through Hole
1	RV7	10K	Trimmer Potentiometer, 10K, 1 Turns, Through Hole
3	RV8-RV10	10K	Trimmer Potentiometer, 4k7, 1 Turns, Through Hole
2	SW1,SW1.1	SRRM254700	Rotary Switch, Through Hole, 5 Position, 2 Pole,