

Bill Of Materials

6 Capacitors

Quantity	References	Value	Description
6	C1-C6	0.47u	CAP 1.0uF 50V CERAMIC F 1206

Sub-totals:

25 Resistors

Quantity	References	Value	Description
1	R1	510	SMD1206 250 mW, ± 1%
1	R2	1k	SMD1206 250 mW, ± 1%
1	R3	2K2	SMD1206 250 mW, ± 1%
1	R4	5K2	SMD1206 250 mW, ± 1%
3	R5,R13,R20	47K	SMD1206 250 mW, ± 1%
1	R6	2k2	SMD1206 250 mW, ± 1%
2	R7-R8	330	SMD1206 250 mW, ± 1%
5	R9,R12,R23-R24,R26	12K	SMD1206 250 mW, ± 1%
1	R11	8k2	SMD1206 250 mW, ± 1%
4	R14-R17	8K2	SMD1206 250 mW, ± 1%
1	R18	4K7	SMD1206 250 mW, ± 1%
2	R19,R25	240K	SMD1206 250 mW, ± 1%
2	R21-R22	0.1	Through Hole Resistor, 0.1 ohm, SQ Series, 5 W, ± 5%, Axial Leaded

Sub-totals:

8 Integrated Circuits

Quantity	References	Value	Description
1	U1	LM317T	1.5A Adjustable Output Positive Voltage Regulator
1	U2	TL431	Adjustable Precision Shunt Regulators.
2	U3,U6	LM393	Dual, General Purpose, Differential Comparator
2	U4,U7	7SEGM VOLTMETER	
1	U8	OPA137PA	Low Cost FET-Input Operational Amplifiers (1MHz, 3.5V/us, 4.5-36V

)
1	U10	AMPERMETER	

Sub-totals:

5 Transistors

Quantity	References	Value	Description
2	Q1-Q2	IRL2505	55V, 104A @ 25°C, 200W, Single N-Channel HEXFET Power MOSFET in a TO-220AB package
1	Q3	MJ3001	Medium-Power Complementary Silicon Darlington Transistors 80V
2	Q4-Q5	BC337	Silicon NPN Low Power High Frequency Bipolar Transistor (625mW, 150eC)

Sub-totals:

6 Diodes

Quantity	References	Value	Description
1	D1	LED-RED	LED 5MM
3	D3,D2.1-D2.2	STPS2045CT	Schottky Rectifier, 45 V, 20 A, Dual Common Cathode, TO-220AB, 3 Pins, 570 mV

1	D4	1N4738A	8V 21mA Zener Diode
1	D6	1N4747A	20V 12.5mA Zener Diode

Sub-totals:

8 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	FU1	16A	Fuse 5x20mm 16A
2	J1-J2	Banana Connector, 4mm, Jack, Panel Mount, 30A BLUE	Single pin terminal
2	RV1,RV3	5K	Rotary Potentiometer PTV111-4420A-A502
1	RV2	1K	Rotary Potentiometer, Carbon, 1 kohm, 1 Turns, Linear, 50 mW, $\pm 20\%$, PTV09A Se
2	SW1,SW1.1	CK1045	Rotary Switch, 6 Position, 2 Pole, 30 °, 150 mA, 250 V, CK Series

Sub-totals:

Totals:

6 июля 2020 г. 14:20:44