

Bill Of Materials

8 Capacitors

Quantity	References	Value	Description
2	C1-C2	47u	33u 35V 65mA Miniture Electrolytic Capacitor
5	C3,C5-C8	0.22u	CAP 25V CERAMIC SMD1206
1	C4	1u	CAP 100V CERAMIC SMD1206

Sub-totals:

18 Resistors

Quantity	References	Value	Description
1	R1	4K7	SMD1206 1/10W 1%
1	R2	100k	SMD1206 1/10W 1%
1	R3	1	SMD1206 1/10W 1%
1	R4	470	SMD1206 1/10W 1%
1	R5	220	SMD1206 1/10W 1%
2	R6,R17	1M	SMD1206 1/10W 1%
4	R7,R9,R11-R12	100K	SMD1206 1/10W 1%
2	R8,R10	1K	SMD1206 1/10W 1%
1	R13	82K	SMD1206 1/10W 1%
2	R14-R15	10K	SMD1206 1/10W 1%
1	R16	680	SMD1206 1/10W 1%
1	R18	33K	SMD1206 1/10W 1%

Sub-totals:

5 Integrated Circuits

Quantity	References	Value	Description
1	U1	UA78MO5CDCY	Linear Voltage Regulator, 7805, Fixed, 7V To 25V In, 5V And 0.5A Out, SOT-223-3
1	U2	JCB0305D24	Isolated Board Mount DC/DC Converter, 2:1 Input, ITE, 2 Output, 3 W, 24 V, 63 mA, -24 V
1	U3	NMA0505SC	Isolated Board Mount DC/DC Converter, ITE, 2 Output, 1 W, 5 V, 100 mA, -5 V
1	U4	OPA137P	Low Cost FET-Input Operational Amplifiers (1MHz, 3.5V/us, 4.5-36V)
1	U5	ATMEGA8	8 KBytes Flash, 1088 Bytes SRAM, 512 Bytes EEPROM, ADC, Analog Comparator, TWI, SPI, 3 Ports, 3 Timers, 1 USART

Sub-totals:

1 Transistors

Quantity	References	Value	Description
1	Q1	BC327	Silicon PNP Low Power High Frequency Bipolar Transistor (625mW, 150eC)

Sub-totals:

5 Diodes

Quantity	References	Value	Description
1	D1	20BQ030TR	DIODE SCHOTTKY 30V 2A SMB
2	D2-D3	BAT54S	Schottky - 30.0V 0.200A 5.00ns
1	D5	LED-GREEN	LED3MM GREEN
1	D6	LED-RED	LED3MM RED

Sub-totals:

12 Miscellaneous

Quantity	References	Value	Description
----------	------------	-------	-------------

1	B1	9V	AAAx6 Battery holder
1	LCD1	MC21605C6W- SPR-V2	16x2 Alphanumeric LCD
1	RV1	100k	Rotary Potentiometer, Carbon, 100 kohm, 1 Turns, Linear, 50 mW, $\pm 20\%$, PTV09A-2 SeriesI
3	RV2-RV4	22K	Trimmer Potentiometer, 22 kohm, 1 Turns, Through Hole
3	SW1-SW3	OS102011MA1QN1	Slide Switch, SPDT, On-On, Through Hole, OS Series, 100 mA
2	X1-X2	WAGO 234-502	DC Power Connector, DC10A, Jack, 5 A, 2.1 mm, Through Hole Mount, Solde
1	X3	DC-10A	DC Power Connector, DC10A, Jack, 5 A, 2.1 mm, Through Hole Mount, Solde

Sub-totals:

Totals: