

Bill Of Materials

7 Capacitors

Quantity	References	Value	Description
6	C1-C4,C6-C7	0.47u	CAP CER .1uF 50V 10% SMD 1206
1	C5	0.01u	CAP CER .1uF 50V 10% SMD 1206

Sub-totals:

14 Resistors

Quantity	References	Value	Description
1	R1	330	0.1W, 1% 0.1W, 1% SMD1206
5	R2-R6	820	0.1W, 1% 0.1W, 1% SMD1206
4	R7-R8, R12,R15	1K	0.1W, 1% 0.1W, 1% SMD1206
1	R9	10K	0.1W, 1% 0.1W, 1% SMD1206
2	R10,R13	33K	0.1W, 1% 0.1W, 1% SMD1206
1	R11	6K8	Through Hole Resistor, 6.8 kohm, 3 W, \pm 5%,

Sub-totals:

6 Integrated Circuits

Quantity	References	Value	Description
1	U1	IRM-02-5	AC/DC PCB Mount Power Supply 1 Output, 2 W, 5 V, 400 mA
1	U2	Y3C 60A 3CmA	Residual Current Circuit Breakers 63A 30mA
1	U3	LM193	Dual, General Purpose, Differential Comparator
1	U4	74HC74	Dual Positive-Edge-Triggered D-Type Flip-Flops With Clear And Preset
1	U5	ACS755XCB-050	Fully Integrated, Hall Effect-Based Linear Current Sensor with High Voltage Isolation and a Low-Resistance Current Conductor.
1	U6	PC817	High Density Mounting Type Photocoupler.

Sub-totals:

1 Transistors

Quantity	References	Value	Description
1	Q1	BC337	Silicon NPN Low Power High Frequency Bipolar Transistor (625mW, 150eC)

Sub-totals:

7 Diodes

Quantity	References	Value	Description
2	D1,D3	LED-RED	LED5MM
3	D2,D4,D7	1N4148	Si - 75.0V, 0.300A, 4.00ns in DO35 package
2	D5-D6	K2000G	DIAC / SIDAC, 190V, 215 V, DO-15, 2 Pins

Sub-totals:

8 Miscellaneous

Quantity	References	Value	Description
1	FU1	0.1A	Fuse 5x20mm
2	L1-L2	220	Panel lamp with LEDs 230VAC 22mm IP65 red
1	RL1	G6E-134P	RELAY, SIGNAL, SPDT, 3A, 250VAC,
1	SW1	SPST Push Button	SPST Push Button
1	SW2	SS10-16-NP	Rotary Switch, Through Hole, 6 Position, 1 Pole
2	X1-X2	TBLOCK-M4	PCB Mount Barrier Terminal Block, 12.7 mm, 1 Row, 4 Ways, 20 AWG, 8 AWG, 50 A