

EFK: # 5004 - OK 5 AMP BATTERY CHARGER

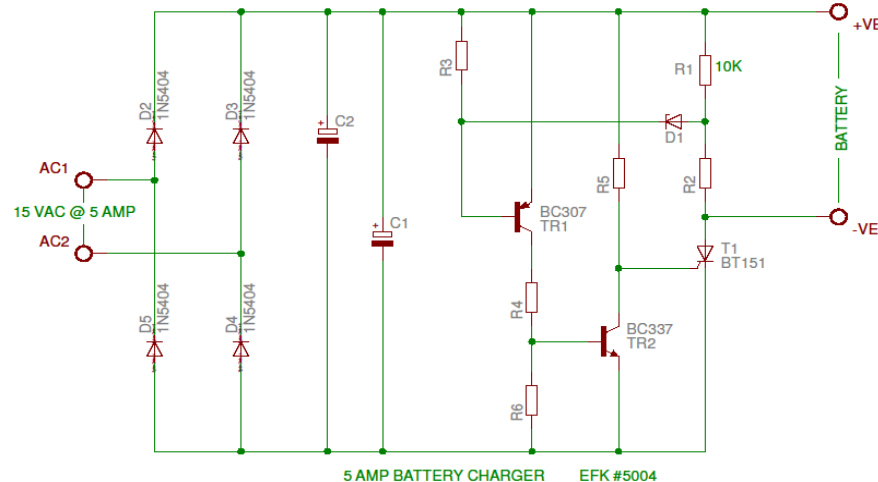
THE CIRCUIT

THIS CIRCUIT IS MAINLY DESIGNED TO CHARGE CAR BATTERIES. IT CAN CHARGE CURRENTS UP TO 5 AMP. THIS CHARGER WILL ALSO SWITCH OFF WHEN THE BATTERY IS FULLY CHARGED, CONTROLLING THE CURRENT FLOWING TO THE BATTERY. A CAR BATTERY WILL NEVER OVER CHARGE IF YOU USE THIS UNIT. IT WILL SWITCH OFF AT ABOUT 13.8 V.

CONSTRUCTION

THE CIRCUIT LAYOUT IS VERY SIMILAR TO KIT 5005. THIS IS ALSO NOT A VERY DIFFICULT KIT TO BUILD. JUST FOLLOW THE PARTS LIST CAREFULLY AND YOU SHOULD HAVE NO PROBLEM. AS WE MENTIONED EARLIER, THE KIT CAN HANDLE UP TO 5AMP. JUST REMEMBER THAT IF YOU WANT FULL CHARGE CURRENT THE SCR1 MUST BE MOUNTED ON A HEATSINK. THE CHARGER CAN BE CHANGED TO A 12 AMP CHARGER BY REPLACING SCR1 (BT151) WITH A BT 152. THE TRANSFORMER NEEDED FOR THIS KIT MUST BE AT LEAST 5 AMP AT ABOUT 15V AC. A AMPMETER CAN BE PLACED IN SERIES WITH THE BATTERY TO SEE HOW MUCH CURRENT YOU ARE CHARGING YOUR BATTERY WITH.

**ENSURE THAT ALL JOINTS ARE PROPERLY SOLDERED.
DRY JOINTS CAN PREVENT YOUR KIT FROM WORKING PROPERLY.**



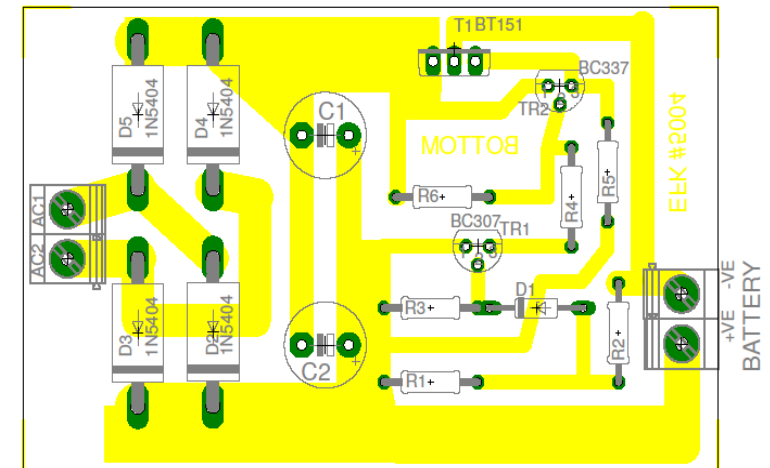
CIRCUIT DIAGRAM

THE COMPONENT LIST

R1, R3	10K 1/4W Resistor	Brown Black Orange Gold	2
R2	2K7 1/4W Resistor	Red Violet Red Gold	1
R4	4K7 1/4W Resistor	Yellow Violet Red Gold	1
R5, R6	1K 1/4W Resistor	Brown Black Red	2
D1	10V Zener Diode 400mW		1
D2 - D5	1N5408 Diode		4
TR1	BC307 or BC 327 PNP		1
TR2	BC337 or BC237 NPN		1
SCR1	BT151 or Similar SCR		1
C1, C2	1000MF 25V Radial OR 2200MF 25V Radial Electrolytic		2
PCB Term	2Way Choc Block		2
PCB	EFK # 5004		1

**CHECK PARTS AGAINST THE COMPONENT LIST.
BEFORE SOLDERING**

**CHECK THAT ALL COMPONENTS ARE CORRECTLY PLACED ON THE BOARD.
MAKE SURE THAT ALL POLARISED COMPONENTS ARE PLACED AND SOLDERED THE
RIGHT WAY ROUND.**



THE COMPONENT LAYOUT