

half-bridge

50k 17 mm PCB mount linearHalf Bridge Driver / SSTC Driver Bill of Materials

Ref	Value
C1	1 nF 50 V ceramic disc capacitor
C2	0.1 uF 50 V ceramic disc capacitor
C3	100 pF 50 V ceramic disc capacitor
C4	0.1 uF 50 V ceramic disc capacitor
C6	3.3 nF 50 V ceramic disc capacitor
C7	0.1 uF 50 V ceramic disc capacitor
C8	100 uF 25 V electrolytic polarized radial capacitor
C9	10 uF 50 V electrolytic polarized radial capacitor
C10	1 uF 50 V ceramic disc capacitor
C11	1 uF 50 V electrolytic polarized radial capacitor
C12	1 uF 50 V electrolytic polarized radial capacitor
C13	1 uF 50 V ceramic disc capacitor
C14	1 uF 50 V ceramic disc capacitor
C50	0.1 uF 50 V ceramic disc capacitor
C51	0.1 uF 50 V ceramic disc capacitor
D1	LED (color of your choice)
D2	LED (color of your choice)
D3	1N4148
D4	1N4148
D5	1N4007/UF4007
D6	1N4007/UF4007
D7	1N4007/UF4007
D10	1N4007/UF4007
D11	1N4007/UF4007
D12	1N4007/UF4007
D13	1N4007/UF4007
D14	1N4007/UF4007
D15	1N4742A 12 V Zener Diode
D19	Inline pin Full-Wave Diode Bridge (100V min / 2A min) e.g. KBL401G Many will work if you bend the pins
D20	1N4007/UF4007
D21	1N4007/UF4007
D22	1N4007/UF4007
D23	1N4007/UF4007
J1	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
J2	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
J3	2.1mm Male Barrel Jack (PCB Mount) e.g. WTJ-020-037A CIC Components
J4	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
J5	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
J6	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
J8	2 position 5.0/5.04 mm spacing screw terminal block PCB mount
JP1	1 by 3 pin header, 2.54 mm pin spacing
JP2	1 by 3 pin header, 2.54 mm pin spacing
JP3	1 by 3 pin header, 2.54 mm pin spacing

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JP4	1 by 2 pin header, 2.54 mm pin spacing
POT1	100k 17 mm PCB mount linear taper potentiometer
POT2	50k 17 mm PCB mount linear taper potentiometer
R1	10k $\frac{1}{4}$ watt
R2	1M $\frac{1}{4}$ watt
R3	1k $\frac{1}{4}$ watt
R4	3.3k $\frac{1}{4}$ watt
R5	10k $\frac{1}{4}$ watt
R7	10k $\frac{1}{4}$ watt
R8	1k $\frac{1}{4}$ watt
R9	1k $\frac{1}{4}$ watt
R10	3.3R 4 watt metal oxide or metal film capacitor
R11	10k $\frac{1}{4}$ watt
R20	10k $\frac{1}{4}$ watt
R21	1k $\frac{1}{4}$ watt
R22	10R 2 watt metal film capacitor (burden resistor may need adjustment)
R23	optional 10R 2 watt metal film capacitor (burden resistor may need adjustment)
R24	100R $\frac{1}{4}$ watt
R25	1M $\frac{1}{4}$ watt
R26	10k $\frac{1}{4}$ watt
R31	100k $\frac{1}{4}$ watt
R32	10k $\frac{1}{4}$ watt
U1	tc4420 Microchip DIP-8 package (UC37322 may be substituted for 9A drive)
U2	tc4420 Microchip DIP-8 package (UC37322 may be substituted for 9A drive)
U3	LM7815 TO220 package
U4	LM339 DIP-14 package
U6	CD40106 DIP-14 package
U7	4N28 DIP-6 package