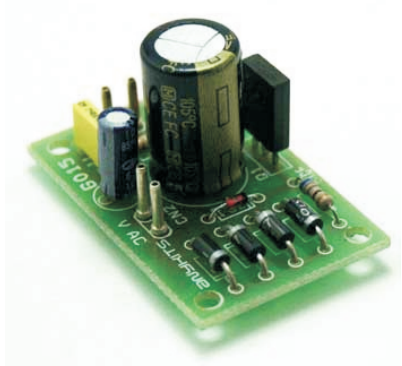
9 VDC POWER SUPPLY

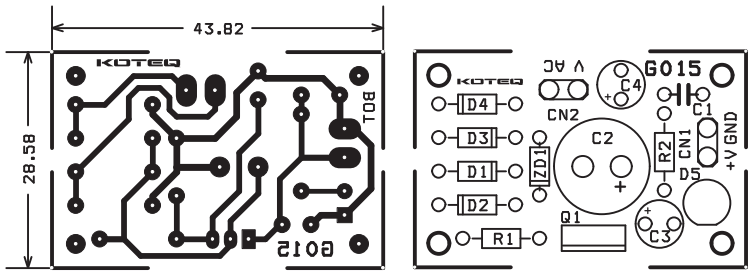
Tiny low current 9 VDC Regulated Power supply designed around bipolar transistor and zener diode. The circuits call as series voltage regulator or emitter follower voltage regulator. The unregulated supply fed to input and the circuit regulate the voltage and provide constant 9V DC, 250mA. The zener diode provides the reference voltage to the base of the transistor. This is very suitable power supply for small projects as it can provide any supply output by changing just the zener diode.



Other output voltage can be obtain by changing the zener diode
Output Voltage Formula Vout=Vz-VBe
Vz=Zenner diode Volatge, VBe=0.7V

The circuit provides is used to Now days you get all various voltages output regulators, sometimes you required

Features
Input - 12 VAC or DC, 500 mA
Output - 9 VDC / 250 mA, Zener regulated low ripple DC voltage
Input bridge rectifier made from discrete Diodes
LED indication for output
Terminal pins for connecting input and output
Four mounting holes of 3.2 mm each
PCB dimensions 29 mm x 44 mm



SR.	QTY.	REF.	DESCRIPTION
1	1	CN1	2 PCB PIN
2	1	CN2	2 PCB PIN
3	1	C1	0.1uF
4	1	C2	1000uF/25V
5	1	C3	100uF/25V
6	1	C4	10uF/50V OR 63V
7	4	D1,D2,D3,D4	1N4007
8	1	D5	RED LED
9	1	Q1	BD139
10	1	R1	680E
11	1	R2	470E
12	1	ZD1	10V ZENER