

# 7742

## HV400 Variable High Voltage Regulator (100-300V 100mA & 30V 5A)

### Features

Maximum input AC: 260V AC or 350V DC

Maximum output voltage: 300V DC @100mA

Output voltage is set by the resistor trimmer

Soft startup

Designator	Value	Quantity	Remarks
B1, B2	KBU1010	2	Diode Bridge
C1, C2, C5	100uF 450V	3	Electrolytic Capacitor
C3, C6	100nF 400V	2	MKS Film Capacitor
C7	4.7uf 450V	1	Electrolytic Capacitor
C10, C13	100uF 50V	2	Electrolytic Capacitor
C8, C11	10000uF/15000uF/50V	2	Electrolytic Capacitor
C9, C12	100nF/100V	2	MKS Film Capacitor
D1	1N5341B	1	Zener Diode 6.2V 5W
D2, D3	1N4007	2	Diode
L1	Inductor	1	Option, either use R1 or L1
Q1	MJE5742 TO-220	1	NPN Power Transistor
Q2	Open		
R1	200R 5W	1	
R2, R4	10R 3W	2	
R3	20K 3W	1	
R5	68K 3W	1	
R6, R7	200K 2W	2	
R8	221R 1/4W	1	
R9	10K 1/4W	1	
R10, R16	100R 1/4W	2	
R11	N/A		Reserved
RV1	500R (501)	1	Resistor Trimmer
RV2	5K (502)	1	Resistor Trimmer
VR1	LM1085-ADJ TO-220	1	
VR2	LM1084-ADJ TO-220	1	
AC IN, HT AC, HV1, LV, L1	2P Blue Connector	5	KF301-2P
Medium heat sink	TO22K	3	
3mm nut and rod		4	
3mm screws		3	
Mica insulator TO-22		3	
Plastic Bead TO-22		3	
PCB		1	

Last Update

05/02/2013