

SOFTY 1 Power Supply

Ref Des	Value	Description	Notes	Supplier Part No.	Quantity
C1,2,3,4	100n	Ceramic capacitor			4
C5	47uF/35V	Electrolytic capacitor			1
D1,2	1N4148	Small signal silicon diode	only fit if IC4 not required		2
IC1	ITV0505SA	1W DC-DC converter 5 to 5V		RS 122-6055	1
IC2	ITR0305S12	3W DC-DC converter 5 to 12V		RS 213-4167	1
IC3	IHL0205D15	2W DC-DC converter 5 to +/-15V		RS 124-4966	1
IC4	LM317LZ		see note 2		1
J1	USB Socket Type B		fix to PCB with hot melt adhesive	RS 771-0035	1
J2	5-pin DIN Socket		DC connections		1
R1	470R	500mW resistor			1
R2,3,5	2K2	250mW resistor	see note 2		3
R4	110R	250mW resistor	see note 2		1
RL1	HFD23/005-1ZS	Relay 5V Coil SPDT		RS 176-2961	1
TVS1	1N6269A	Vishay 1.5KE8.2CA-E3/54		RS 638-8700	1

Offboard Parts

Enclosure	Enclosure 87x57x36mm	Hammond 1591XXLBK		RS 772-3145	1
PCB fixing screws					4
USB power supply	5V @ 2A		see note 1		1
USB cable	A to B				1
Power cable		5-pin DIN plug, 300mm 5-core cable, 6-pin molex header			1

Notes:

¹ a typical 1A power supply will struggle particularly when programming

² only fit IC4/R4/R5 if a programming voltage other than a nominal 29V is required