

ELEX 1102

Electronic Fabrication Tools and Techniques

Product: DC Power Supply

Author: Instructor

Revision: B Parts List

Electrical

Ref Des	Description	Manufacturer	Part Number	Qty
C1,C2	Capacitor, Al electrolytic, Radial, 3300uF, 20%, 25V	Nichicon	UVR1E332MHD	2
C3,C5	Capacitor, Al electrolytic, Radial, 0.1uF, 20%, 50V	Nichicon	UVR1H0R1MDD	2
C4,C6	Capacitor, Al electrolytic, Radial, 1uF, 20%, 50V	Nichicon	UVR1H010MDD	2
C7	Capacitor, Al electrolytic, Radial, 2.2uF, 20%, 50V	Nichicon	UVR1H2R2MDD	1
D1,D2,D3,D4	Diode, General purpose, DO41, 600V, 1A	Fairchild Semiconductor	<u>1N4005</u>	4
D5	Diode, Light emitting, Red, Panel Mount, 2-pin	Mode Electronics	<u>55-432-0</u>	1
F1	Fuse, Glass, Miniature, Slow Blow, 250V, 0.375A	Bussman / Eaton	MDL-3/8	1
J1	Connector, Banana, Red, Panel Mount, Solder Lug	Johnson	<u>108-0902-001</u>	1
J2	Connector, Banana, White, Panel Mount, Solder Lug	Johnson	<u>108-0901-001</u>	1
J3	Connector, Banana, Violet, Panel Mount, Solder Lug	Johnson	<u>108-0912-001</u>	1
J4	Connector, Banana, Black, Panel Mount, Solder Lug	Johnson	<u>108-0903-001</u>	1
P1	Power cord, 18AWG x 3, 1.8m, 125V, 10A	Volex	<u>17237-8-B1</u>	1
R1	Resistor, Axial, 10R, 5%, 10W	Ohmite	20J10RE	1
R2,R4	Resistor, Axial, Carbon Film, 390R, 5%, 0.25W	Stackpole Electronics	<u>CF14JT390R</u>	2
R3	Potentiometer, Linear, 5K, 20%, 0.1W, Panel Mount, Solder Lug	Mode Electronics	<u>62-243-0</u>	1
S1	Switch, SPST, Round, Rocker, Quick Connect, 250V, 10A	Mode Electronics	46-100J-0	1
T1	Transformer, Single Primary, Center tapped, 33V, 1A	Hammond	<u>166J33</u>	1
VR1	Regulator, Fixed, TO220-3, LM7805, 5V, 1A	Fairchild Semiconductor	LM7805ACT	1
VR2	Regulator, Adjustable, TO220-3, LM317, 1.5A	Fairchild Semiconductor	LM317TFS-ND	1
VR3	Regulator, Fixed, TO220-3, LM7915, -15V, 1A	Fairchild Semiconductor	<u>LM7915CT</u>	1

[•] Consumable items are not included



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Mechanical

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M1	Board, Printed circuit, DC Power Supply, Rev B	Enigma Interconnect	DC Power Supply Rev B	1
M2	Bushing, Strain relief, Black, Nylon	Essentra Components	SRB-R-5	1
M3	Enclosure, Custom, 3"D x 5"W x 4"H, Rev B, Aluminum	Bud Industries	<u>49239</u>	1
M4 – M7	Feet, Leveling, 1/4"H x 1/2"D, Black, Adhesive, Rubber	Mode Electronics	<u>54-880-0</u>	4
M8	Holder, Fuse, $\frac{1}{4}$ " x $\frac{1}{4}$ ", Panel mount, 250V, 20A	Eaton	BK/HTB-241-R	1
M9 – M11	Insulator, TO220, Mica	Keystone Electronics	<u>4672</u>	3
M12	Knob, $^{3}/_{8}$ "H x $^{7}/_{8}$ "D, Set screw	Mode Electronics	<u>54-217-0</u>	1
M13 – M15	Nut, Hex, #6-32, Nylon	N/A*	N/A	3
M16 – M21	Nut, Hex, #6-32, Steel	N/A*	<u>N/A</u>	6**
M22	Nut, Hex, #8-32, Steel	N/A*	<u>N/A</u>	1
M23 – M25	Screw, Bind, Slot, #6-32, 1/2", Nylon	N/A*	N/A	3
M26 – M28	Screw, Round, Robertson #1, #6-32, 1/2", Steel	N/A*	<u>N/A</u>	3**
M29 – M31	Screw, Round, Robertson #1, #6-32, 1", Steel	N/A*	N/A	3
M32	Screw, Round, Robertson #2, #8-32, 1/2", Steel	N/A*	N/A	1
M33 – M35	Spacer, #6 x $^3/_8$ "H x $^1/_4$ "D, Aluminum	N/A*	N/A	3
M36, M37	Terminal, Quick Connect, Female, 22 – 18 AWG, Crimp	Mode Electronics	<u>73-334-0</u>	2
M38	Terminal, Ring Tongue, 22 – 16 AWG, Crimp	Panduit	P18-8R-C	1
M39 – M53	Tie, Cable, 3 ¹ / ₈ ", Nylon	Panduit	PLT.7M-M	15
M54	Tube, Heatshrink, 4"H x ³ / ₁₆ "D, Black, Polyolefin	Alpha Wire	F221B3/16 BK100	1
M55 – M60	Washer, Flat, #6, Steel	N/A*	<u>N/A</u>	6
M61 – M65	Washer, Split, #6, Steel	N/A*	N/A	5
M66	Washer, Split, #8, Steel	N/A*	N/A	1
M67	Washer, Star, #8, External, Steel	N/A*	<u>N/A</u>	1
M68	Washer, Star, 1/4", Internal, Steel	N/A*	<u>N/A</u>	1

[•] Consumable items are not included

Date: 20160602

^{*} Suggested supplier: Pacific Fasteners

^{**} Includes 1 spare