

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer	Alternate PartNumber	Alternate Manufacturer	Alternate PartNumber	Alternate Manufacturer	Alternate PartNumber	Alternate Manufacturer	Alternate PartNumber	Alternate Manufacturer	Alternate PartNumber	Alternate Manufacturer
C1, C2	2	560uF	560µF 16V Aluminum Capacitors Radial, Can 10000 Hrs @ 105°C	6.3x5.5mm	16ZLJ560MSX16	Rubycon												
C3	1	2.2uF	CAP, CERM, 2.2 µF, 25 V, +/- 10%, XSR, 1206	1206	GRM316R61E225KA12 0	MuRata												
C4, C9	2	10uF	10µF 250V Aluminum Capacitors Radial, Can 2000 Hrs @ 85°C	10x17.5	UVR2E100MPD	Rubycon												
C8	1	2200pF	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Disc 10x8mm	Disc 10x8mm	DE1E3K0222MASBA01	MuRata												
C10	1	4.7uF	CAP, CERM, 4.7 µF, 50 V, +/- 10%, XSR, 1206	1206	GRM319R61H475KA12	MuRata												
C11	1	22uF	CAP, CERM, 22 µF, 25 V, +/- 10%, XSR, AEC-Q200 Grade 3, 1206	1206	GRT31CR61E229KE01L	MuRata												
D1	1	100V	Diode, Schottky, 100 V, 1 A, SMA	SMA	SS110-TP	Micro Commercial Components												
D3, D7	2	600V	Diode, Standard Recovery Rectifier, 600 V, 1 A, TH	DO-41	1N4006-7	Diodes Inc.												
D4	1	200V	Diode, Zener, 200 V, 500 mW, SMB	SMB	1SMB5956B173G	ON Semiconductor												
D6	1	1.7V	Diode, Ultrafast, 1000V, 1A, SMA	SMA	US1M-13-F	Diodes Inc.												
D8	1		DIODE SWITCH 200V 200MA SOD323	SOD-323	8AS20HT1G													
F1	1		Fuse, 0.25 A, 250 V, TH	TR5 fuse 8.5mm DIA	37202500001	Littelfuse												
J1	1		Jumper Wire, 300mil spacing, Orange, pkg of 200	300 mil Jumper Wire	923345-03-C	3M												
J2, J3	2		Jumper Wire, 400 mil Spacing, Yellow, Pkg of 200	Jumper Wire, 400 mil Spacing, Yellow, Pkg of 200	923345-04-C	3M												
L1	1	10mH	COMMON MODE CHOKE 450MA 2 LN TH	17x12.32x15.32 mm	744862100	Würth Elektronik												
Q1	1	400 V	Transistor, NPN, 400 V, 1 A, SOT-223	SOT-223	STN2580	STMicroelectronics												
R1	1	2.0k	RES, 2.0k ohm, 5%, 0.125W, 0805	0805	CRCW08052K00JNEA	Vishay-Dale												
R2, R3, R7	4	4.7Meg	RES, 4.7Meg ohm, 5%, 0.25W, 1206	1206	CRCW12064M70JNEA	Vishay-Dale												
R6	1	330	RES, 330, 5%, 0.25 W, 1206	1206	CRCW1206330RJNEA	Vishay-Dale												
R8, R10, R12	3	1.5Meg	RES, 1.5 M, 5%, 0.25 W, 1206	1206	CRCW12061M50JNEA	Vishay-Dale												
R9	1	0	RES, 0, 5%, 0.25 W, 1206	1206	RC1206JR-070RL	Yageo America												
R11	1	140k	RES, 140 k, 1%, 0.1 W, 0603	0603	CRCW0603140KFKEA	Vishay-Dale												
R13	1	893	RES, 893, 1%, 0.1 W, 0603	0603	CRCW0603893KPKEA	Vishay-Dale												
R14	1	35.7k	RES, 35.7 k, 1%, 0.1 W, 0603	0603	RC0603FR-0735K7L	Yageo America												
R15	1	1.69	RES, 1.69, 1%, 0.125 W, 0805	0805	CRCW08051R69FKEA	Vishay-Dale												
T1	1		Flyback Transformer, 1.7mH	RL TH-1195	Renco													
TP1, TP3	2	Red	Test Point, TH, Miniature, Red	Keystone5000	5000	Keystone												
TP2, TP5	2	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone												
TP4	1		Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone												
TP6	1		Test Point, Miniature, Black, TH	Black Miniature Testpoint	5001	Keystone												
U1	1		Constant-Voltage, Constant-Current Controller With Primary-Side Regulation, BJT Drive, DBV0005A	DBV0005A	UCC28722DBVR	Texas Instruments												
C5	0	470uF	CAP ALUM POLY 470UF 20% 6.3V TH	5x7 mm	RS89J471MDNASQJT	Nichicon												
C6	0	4.7uF	CAP, CERM, 4.7 µF, 10 V, +/- 10%, XSR, 0603	0603	CGB0B1XSR1A475K055 AC	TDK												
C7	0	22uF	CAP, CERM, 22 µF, 10 V, +/- 20%, XSR, 0603	0603	CL10A226MP8NJNE	Samsung												
D2	0	7.5V	Diode, Zener, 7.5 V, 1.5 W, AEC-Q101, SMA	SMA	1SMA5922B13G	ON Semiconductor												
D5	0	100V	Diode, Schottky, 100V, 1A, SMA	SMA	SS1110-E3-01T	Vishay-Semiconductor												
R4	0	511	RES, 511, 1%, 0.1 W, 0603	0603	CRCW0603511RPFKEA	Vishay-Dale												

Notes:
Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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