

Quantity	Designator	Value	Description	Package	Manufacturer	Manufacturer PN
6	C1, C2, C3, C14, C16, C17	6.8nF 2kV	6n8 6x11x18 2kV r15	r15 18x6	TDK	B32672L8682J000
1	C4	4.7uF 50V NS	10uF	1206	MURATA	GRM319R61H475KA12D
5	C5, C7, C10, C11, C30	330uF 63V	330uF 63V	r5 d13	WURTH	860080778021
3	C6, C6A, C38	4.7uF 50V	10uF	1206	MURATA	GRM319R61H475KA12D
2	C8, C13	220pF 1000V	220pF	1206	MULTICOMP	MC1206B221K102CT
1	C9	33nF 630Vdc	33nF 630Vdc	r22.5 26.5x16	KEMET	R73QN23304030J
3	C12, C23, C27	22uF 35V	Capacitor 22uF 35V	r2.54 d6.3	UNITED CHEMI CON	EFL-350ELL220MF07D
7	C15, C26, C28, C50, C61, C72, C76	1nF 50V	1nF, 100nF	0603	KEMET	C0603X102K5RAC3316
2	C18, R37	NS		0603	-, [NoValue]	NS
3	C19, C29, C58	10nF 50V	1nF, [NoValue]	0603	AVX	06035C103JAT2A
3	C19A, C25, C45	47nF 50V	1nF	0603	KEMET	C0603C473K5RACTU
3	C20, C24, C46	10pF 50V	10pF	0603	AVX	06035A100JAT2A
1	C21	22nF 50V	1nF	0603	KEMET	C0603C223K5RACAU0
1	C22	2.2uF 450V	Capacitor 2.2uF 450V	r3.5 d8	UNITED CHEMI CON	ESMQ451ELL2R2MH85D
2	C31, C44	1uF 310VAC	1uF/310Vac X2-Class	20x18x12mm	Kemet	F861BZ105M310A
8	C32, C33, C49, C52, C55, C56, C57, C73	100nF 50V	100nF, 1nF	0603	KEMET	C0603X104K5RAC3316
1	C34	100pF 50V	10pF	0603	AVX	06035A101JAT2A
2	C35, C59	220uF 35Vdc	Capacitor 220uF 35Vdc	r3.5 d8	RUBYCON	35ZL220MEFC8X16
1	C36	10uF 25V	470nF	0603	TDK	C1608X5R1E106M080AC
3	C37, C51, C53	1uF 50V	470nF	0603	TAYO YUDEN	UMK107B1J05KA-T
1	C39	4.7 nF 50V		0603	YAGEO	CC0603RX7R9BB472
2	C40, C42	22nF 500V	22nF	1206	KEMET	C1206V223KCRACU
1	C41	330uF 450V	330uF 450V	r10 d30	UNITED CHEMI CON	EKMZ451VSN331MR30S
1	C43	NS	33nF 1000Vdc	r22.5 26.5x16	KEMET	NS
1	C47	4.7nF 50V	680pF	0603	AVX	06035C472KAT2A
1	C48	680pF 50V	680pF	0603	KEMET	C0603C681J5GACTU
1	C54	1nF 50V	100nF	0603	KEMET	C0603X102K5RACTU
2	C60, C74	1uF 50V	100nF, 1uF	1206	KEMET	C1206C105K5RECTU
2	C62, C63	22pF 200V	1nF	0603	KEMET	C0603C220J2GACTU
2	C64, C65	10nF 630V	CL31B103KHFNNNE 10000 pF ±10% 630V Ceramic Capacitor X7R 1206 (3216 Metric)	1206	Samsung Electro-Mechanics	CL31B103KHFNNNE
1	C66	0.1uF 450V	B32671P4104K000 CAP FILM 0.1UF 10% 450VDC RADIAL	Radial 13mm	EPCOS - TDK Electronics	B32671P4104K000
1	C69	2.2nF 50V	22nF	1206	KEMET	C1206C222K5RACTU
1	C75	1nF 50V NS	1nF	0603	KEMET	C0603X102K5RAC3316
4	CableTie1, CableTie2, CableTie3, CableTie4	Cable tie 100mmx2.5mm	Cable Tie 100x2.5mm Nylon	100mmx2.5mm	RSComponents	233-499
4	CY1, CY3, CY8, CY11	4.7nF 300V(Y2)	4.7nF/300Vac Y-Class	r7.5	KEMET	C947U472MZVDBA7317
5	CY2, CY4, CY5, CY6, CY10	10nF 300V(Y2)	4.7nF/300Vac Y-Class	r7.5	KEMET	C981U103MZVDBA7317
4	CY4A, CY5A, CY7, CY9	NS	4.7nF/300Vac Y-Class	r7.5	KEMET	NS
6	D1, D2, D3, D9, D11, D23	75V 100mA	1N4148 miniMelf Series 500 mW 100 V Max Reverse Voltage 200 mA Small Signal Diode -	SOD-323F	ON SEMICONDUCTOR	1N4148WS
2	D4, D7	2.495V 1% 36V NS	TL43xx Precision Programmable Reference	SOT-23-3	TEXAS INSTRUMENTS	TL431AIDBZR
2	D5, D10	NS	1N4148 miniMelf Series 500 mW 100 V Max Reverse Voltage 200 mA Small Signal Diode -	SOD-323F	ON SEMICONDUCTOR	1N4148WS
2	D6, D18	2.2V 20mA	LED, 0603, Green SMD, 20 mA, 2.2 V, 560 nm	0603	ROHM	SML-D12P8WT86C
7	D8, D12, D14, D16, D20, D24, D25	600V 1A	Fast Rectifier 600 V, 1 A, 1.3 V, 250 ns, 30 A	DO-214AC	ON SEMICONDUCTOR	RS1J
Quantity	Designator	Value	Description	Package	Manufacturer	Manufacturer PN
1	D13	150V 3A	Fast Rectifier 600 V, 1 A, 1.3 V, 250 ns, 30 A	DO-214AC	DIODES INC.	STP53150U
1	D15	2.495V 1% 36V	TL43xx Precision Programmable Reference	SOT-23-3	TEXAS INSTRUMENTS	TL431AIDBZR
1	D17	5.1V 500mW	D Z 5.1V 500mW			
1	D21	650V 8A	D 650 V, 8 A, 1.35 V	TO-263	ROHM	SCS308AJTLL
1	D22	600V 15A	Diode Bridge	GSIB15	Vishay General Semiconductor	GSIB1560-E3/45
1	D26	80V 1A	Fast Rectifier 600 V, 1 A, 1.3 V, 250 ns, 30 A	DO-214AC	DIODES INC.	B180-13-F
1	F1	15A 450V	Fuse 250Vac/20A	5mmx20mm	LITTLEFUSE	0487015.MXEP
1	F2	20A 80V	Fuse, PCB, 20A, 80Vdc, FKS ATO	FKS ATO	LITTLEFUSE	166.7000.5202
2	FAN1, FAN2	Ventiladores CC Fan	FAN 35x35x10	35mmx35mmx10mm	Sunon	MF35101V1-1000U-A99
3	FB1, FB2, FB3	220OHM @100MHz	0603 ferrite bead 220ohm@100MHz	RESC1608X06N	Murata Electronics	BLM18AG221SN1D
1	HS1	Custom heatsink	Heatsink 95x93x36mm	95x93x36mm	MPS	MPS600W
2	J1, J6	50A	Connector	M3	WE	74650073R
1	J2	10A	CON 250V 10A IEC 14	AC Power 3 pins connector	Bulgin	PX0580/PC
2	J3, J4	250VAC/DC 3A	Connector	Through-hole type shrouded header	JST	B2B-XH-A(LF)(SN)
1	J5	Type D	DIN 41612 Right Angle 15A	H15	HARTING	09 06 115 2932
1	L1	90uH	Custom Inductor 90uH	RM12	MPS	RM12-L1
1	L2	300uH	IND 300uH O 35x25 V 3 núcleos	35x25	MPS	3525-L2
1	L3	2x11.4mH 10A	CM Filter VAC 2x11.7mH@10kHz 12A	37x35x21mm	VAC	T60405-R6166-X210
1	L4	17uH 6A	Custom Inductor 17uH 6A	16,8mmx10mm	Custom	1610-L4
1	L6	2x11.7mH 12A	CM Filter VAC 2x11.7mH@10kHz 12A	38x29.1x21mm	VAC	T60405-R6166-X035
2	Q1, Q2	TP65H150G4PS	TPH GaN 150mOHM	TO-220	Transphorm	TP65H150G4PS
1	Q3	TP65H070G4PS	TPH GaN 70mOHM	TO-220	Transphorm	TP65H070G4PS
1	Q3A	NS	TPH GaN 70mOHM	TO-220	Transphorm	TP65H070G4PS
4	Q4, Q5, Q6, Q7	120V 10A 31mR	NMOS 120V 10A 31mR	PQFN-8	INFINEON	IRFH5015TRPBF
1	Q8	20V 0.9A	PMOS -20V 0.9A 600 mohm	SOT-23-3	DIODES INC.	ZXM61P02F
1	R1	30Ω	NTC	MS15	AMETHERM	MS15 30004

Quantity	Designator	Value	Description	Package	Manufacturer	Manufacturer PN
8	R2, R11, R12, R17, R20, R21, R42, R85	100kΩ	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603F100K
1	R3	47	Resistor 0603	1206	YAGEO	RC1206JR-070RL
1	R4	510Ω	Resistor 0603	0603	VISHAY	CRCW0603510RFKEA
10	R5, R19, R26, R33, R40, R44, R48, R48A, R102, R103	10kΩ	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603J10K
1	R6	5mΩ	Resistor 2512	2512	OHMITE	PCS2512FR0050ET
1	R6A	20mΩ NS	Resistor 2512	2512	OHMITE	PCS2512DR0200ET
1	R7	30Ω	Resistor 1206	1206	MULTICOMP	MCWR12X30R0FTL
1	R8	NS	Resistor 1206	1206	-	NS
1	R9	47Ω	Resistor 0603	1206	YAGEO	RC1206JR-070RL
7	R10, R16, R18, R24, R62, R66, R69	0Ω	Resistor 0603, Resistor 1206, [NoValue]	1206	YAGEO	RC1206JR-070RL
1	R13	2kΩ	Resistor 1206	1206	TT ELECTRONICS	WCR1206-2KFI
3	R14, R14A, R93	20Ω	Resistor 1206	1206	YAGEO	RC1206JR-0720RL
4	R15, R29, R39, R47	20kΩ	Resistor 1206	1206	YAGEO	RC1206JR-0720KL
1	R22	39KΩ	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603F39K
2	R23, R41	51KΩ	Resistor 0603	0603	VISHAY	CRCW060351K0FKEA
1	R25	100KΩ NS	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603F100K
1	R27	2Ω 600mW	THT 1/4W	MRS25	VISHAY	MRS25000C2008FCT00
1	R28	120kΩ	Resistor 0603	0603	YAGEO	RC0603FR-07120KL
1	R30	220kΩ	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603F220K
6	R31, R32, R35, R36, R81, R83	2kΩ	Resistor 0603	0603	VISHAY	CRCW06032K00FKEAHP
3	R34, R57, R60	10Ω	Resistor 0603	0603	VISHAY	CRCW060310R0FKEA
1	R38	20KΩ	Resistor 0603	0603	YAGEO	RC0603FR-0720KL
3	R43, R67, R94	1kΩ	Resistor 0603	0603	YAGEO	RC0603JR-071KL
4	R45, R49, R54, R56	3.9MΩ	Resistor 1206	1206	YAGEO	RC1206FR-073M9L
1	R46	110Ω	Resistor 0603	0603	VISHAY	CRCW0603110R0FKEA
3	R46A, R64, R64A	10Ω NS	Resistor 0603	0603	VISHAY	CRCW060310R0FKEA
4	R50, R51, R72, R73	33mΩ	SMD Resistor	2818	VISHAY	WSHM2818R0330FEB
2	R52, R59	2.43MΩ	Resistor 1206	1206	YAGEO	RC1206FR-072M43L
1	R53	5.1kΩ	Resistor 1206	1206	TT ELECTRONICS	WCR1206-5K1FI
1	R55	100Ω	Resistor 0603	0603	VISHAY	CRCW0603100RFKEA
2	R58, R63	33kΩ	Resistor 0603	0603	YAGEO	AC0603FR-0733KL
Quantity	Designator	Value	Description	Package	Manufacturer	Manufacturer PN
1	R61	9.53kΩ	Resistor 0603	0603	YAGEO	RC0603FR-079K53L
1	R65	62KΩ	Resistor 0603	0603	VISHAY	CRCW060362K0FKEA
1	R68	3.9Ω	Resistor 1206	1206	VISHAY	CRCW12063R90FKEAHP
1	R70	10.2kΩ		0603	YAGEO	RC0603FR-0710K2L
1	R71	10Ω	Resistor 1206	1206	YAGEO	RC1206JR-0710RL
1	R74	100kΩ	NTC	1206	VISHAY	NTHS1206N17N1003JE
2	R75, R76	5.1 OHM	RES 5.1 OHM 1% 1/4W 1206	1206	Yageo	RC1206FR-075R1L
1	R92	150KΩ	Resistor 1206	1206	TE CONNECTIVITY	CRGCQ1206F150K
1	R95	1.2kΩ NS	Resistor 0603	0603	TE CONNECTIVITY	CRGCQ0603F1K2
1	R96	0Ω NS	Resistor 0603	1206	YAGEO	RC1206JR-070RL
1	RL1	12Vdc 30A	Relay 5VDC 30A	27.9x32.5x27.4mm	TE CONNECTIVITY	T9AS1D12-12
1	RL2	12V 10A	Relay	1 Form A	OEG - TE CONNECTIVITY	OJ-SH-112HM,000
5	SK1, SK2, SK3, SK4, SK5	M3x0.5 6mm	Screw M3x6	M3	KEYSTONE	9191-4
6	SP1, SP1A, SP2, SP2A, SP3, SP3A	1.6W/mK	Sil-Pad 2000 thermic isolation	Sil-Pad	BERGQUIST	HF300P-0.001-00-0404
1	SW1	12VDC 0.5A switch	2 contact switch	WS-SLTV	WE	450301014042
1	TR1	150μH 3:1:1	Custom transformer 150μH 3:1:1	RM14	MPS	RM14 - TR1
1	TR2	8.6mH 4.5:1	Custom transformer 8.6mH 4.5:1	EF20	MPS	EF20 - TR2
1	U1	700V 4.5Ω	Flyback Controller	SOIC-8	MPS	HF500GS-15
2	U2, U4	50mA 5000V		SMD-4	ON SEMICONDUCTOR	FOD817A3SD
1	U3	PFC + LLC controller	High-Performance Digital PFC+LLC Combo Controller	SOIC-20/TSSOP-20	MPS	HR1211
1	U5	3V 120mA	Ultra-Low-Noise Low-Dropout, 120mA Linear Regulator	5-SC70	MPS	MP2009EE-3
1	U6	Current sensor	High-Side Current-Sense Amplifier	TSOT23-6L	MPS	MPQ8112AGJ-AEC1-Z
3	U7, U10, U11	2.5V reference voltage	TL431 Precision Programmable Reference	SOT-23-5	Texas Instruments	TL431IDBVT
1	U8	35V SR controller	Synchronous rectifier IC	SOIC-8	MPS	MP6924GS
1	U9	25V/V NS		SC70-6	TI	INA186A1IDCKR
1	U12	20 A	Linear Hall-Effect Current Sensor	SOIC-8	MPS	MCS1802GS-20-Z
1	U13	Current sensor	170 μA, 2 MHz Zero-Drift Op Amps	SOT23-5	Microchip	MCP6V76UT-E/OT
1	VAR1	195J 8KA	Varistor (TVS), 460 V, 615 V, Serial B722, 1240 V, Disc 20mm	Disc 20mm	EPCOS	B72220S0461K101
4	WS1, WS2, WS3, WS4	M3	Brass Hex Threaded Standoff	M3 T10mm	HARWIN	R30-1001002