



Comment	Description	Designator	Footprint	LibRef	Quantity
IRFZ44NPBF	RoHS Compliant Low RDS_on_ Industry-leading quality Dynamic dv/dt Rating Fast Switching Fully Avalanche Rated 175C Operating Temperature	1	TO-220	IRFZ44NPBF	1
LM7812CT/NOPB	1.5-A, 30-V, linear voltage regulator 3-TO-220 -40 to 125	3.3v, 12V	TO254P1054X470X1955-3	LM7812CT/NOPB	2
Cap	Capacitor	C1, C3, C4, C5, C6, C7, C8, C10, C11, C17, C18, C19, C20	Cap1	Cap	13
120u	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C2	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
10nF	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C9	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
470pF	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C12	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
1u	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C13	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
10n	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C14	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
20n	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C15	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
1n	Cap Ceramic 1pF 50V COG 0.25pF Radial 2.5mm 125C Automotive Bulk	C16	CAP_RCER72A472K0A2H03B	RCER72A472K0A2H03B	1
Diode 1N4148	High Conductance Fast Diode	D1	DO-35	Diode 1N4148	1
1N5822	Diode Schottky 40V 3A Through Hole	Dsch1, Dsch2, Dsch3, Dsch4, Dsch5	DIOAD2120W130L950D530P	1N5822	5
1760510000	2 Position Wire to Board Terminal Block Horizontal with Board 0.200 .5.08mm_ Through Hole	J1, J2, J3, J4, J5	1760490000	1760510000	5
Inductor	Inductor	L1	Inductor2	Inductor	1
PC817A	Optoisolator Transistor Output 5000Vrms 1 Channel 4-DIP	Q	DIP762W50P254L650H458Q4B	PC817A	1
DIODE_SCHOTTKY_10MQ100NPBF	Diode Schottky SMD 100V 2A SMA	Q1	Schottky	DIODE_SCHOTTKY_10MQ100NPBF	1
Res1	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	AXIAL-0.3	Res1	18
Res	Resistor	R19, R20, R21	AXIAL-0.3	Res1	3
TL431CLP	Adjustable precision shunt regulator 3-TO-92 0 to 70	U1	TO-92	TL431CLP	1
LM2585T		U2	LM2585T	LM2585T	1
TL3842		Z1	TL3842_PCBLIB	TL3842	1