

MAXREFDES120 BOM

Designation	Qty	Description
C1, C2	2	10uF 10%, 50V, X5R ceramic capacitor (1206) Murata GRM31CR61H106KA12L
C3	1	0.047uF 10%, 100V, X7R ceramic capacitor (0402) Murata GRM155R71H473KE14
C4	0	Not Installed, capacitor (0402)
C5	1	1uF 10%, 50V, X7R ceramic capacitor (0603) Taiyo Yuden UMK107AB7105KA
C6, C12, C13	3	2.2uF 10%, 50V, X7R ceramic capacitor (0805) TDK C2012X7R1H225K125AE
C7	1	4700pF 10%, 50V, X7R ceramic capacitor (0402) Murata GRM155R71H472KA01J
C8	1	330pF 10%, 50V, X7R ceramic capacitor (0402) Murata GRM155R71H331KA01D
C9	1	0.033uF 10%, 50V, X7R ceramic capacitor (0402) Murata GRM155R71H333KE14D
C10	1	1000pF, 10%, 1.5kV, X7R (1206) AVX 1206SC102KAT3A
C15, C19	2	100uF 20%, 10V, X5R ceramic capacitor (1210) Kemet C1210C107M8PACTU
C16, C17	2	220uF 20%, 6.3V Aluminum Capacitor (5.3mm x 5.3mm) Panasonic 6SVPE220MW
C18	1	47uF 20%, 50V aluminum capacitor (8.3mm x 8.3mm) Panasonic EEE-FK1H470P
GND, GNDO, VIN, VOUT	4	Single header pin Samtech FWJ-01-01-T-S
D1	1	100V 2A Schottky Diode (POWERDI123) Diodes DFLS2100-7
D2	1	100V 300mA Schottky Diode (SOD123) Diodes 1N4148W-7-F
D3	1	5.6V Zener Diode (DO-214AC) Diodes SMAZ5V6-13-F
N1	1	100V 22A N-Ch MOSFET (PQFN 8) Fairchild FDMS86102LZ
N2	1	40V 73A 5.9mohm N-Ch MOSFET (TDSON-8) infineon BSC059N04LS G
PTC1	1	470ohm PTC Thermistor (0603) Vishay TFPT0603L4700FV
R1, R20	2	7.5k ohm, 5% resistor (1210)
R2	1	274k ohm 1% resistor (0402)
R3	1	11.3k ohm 1% resistor (0402)
R4	1	9.76k ohm 1% resistor (0402)
R5	1	10k ohm, 1% resistor (0402)
R6, R13	0	Not Installed, resistor (0402)
R7	1	49.9k ohm 1% resistor (0402)
R8	1	75k ohm 1% resistor (0402)
R9	1	90.9k ohm 1% resistor (0402)
R10	1	10.5k ohm 1% resistor (0402)
R11	1	0.012 ohm 1% resistor (1206) Panasonic ERJ-8CWFR012V

R12	1	150k ohm 1% resistor (0603)
R15	1	10 ohm 5% resistor (0402)
R16	1	1k ohm 1% resistor (0402)
R17	1	54.9k ohm 1% resistor (0402)
R18	1	1k ohm 1% resistor (0603)
R19	1	10 ohm 5% resistor (0402)
R21	1	0 ohm 5% resistor (0402)
R22	1	5.1 ohm 5% resistor (0402)
T1	1	3:1 Transformer Würth Electronics 750343289
U1	1	No-Opto Isolated Flyback Controller (16 TQFN) Maxim MAX17690ATE+
U2	1	Secondary Side Synchronous MOSFET Driver (Thin SOT23-6) Maxim MAX17606AZT+
PCB	1	PC board: MAXREFDES120# 24VIN 5VOUT 12.5W Flyback Converter