

Name	Value	Category	Description
Vout	12 V	System Information	Operational Output Voltage
IC Tolerance	18 mV	IC	IC Feedback Tolerance
Cin IRMS	4.43 A	Capacitor	Input capacitor RMS ripple current
Cin Pd	9.83 mW	Capacitor	Input capacitor power dissipation
Cout IRMS	636.23 mA	Capacitor	Output capacitor RMS ripple current
Cout Pd	2.22 mW	Capacitor	Output capacitor power dissipation
D1 Tj	30 °	Diode	D1 junction temperature
Diode Pd	6.97 W	Diode	Diode power dissipation
L Pd	261.05 mW	Inductor	Inductor power dissipation
L Ipp	2.2 A	Inductor	Peak-to-peak inductor ripple current
Ipp percentage	22.04%	Inductor	Inductor ripple current percentage (with respect to average inductor current)
Duty Cycle	26.62%	System Information	Duty cycle
Efficiency	93.20%	System Information	Steady state efficiency
Frequency	288.02 kHz	System Information	Switching frequency
IC Tj	37.59 °C	IC	IC junction temperature
ICThetaJA	40 °C/W	IC	IC junction-to-ambient thermal resistance
IC Pd	189.65 mW	IC	IC power dissipation
Pout	120 W	System Information	Total output power
Iin Avg	2.68 A	IC	Average input current
IC Ipk	11.1 A	IC	Peak switch current in IC
Mode	CCM	System Information	Conduction Mode
Vout p-p	12.12 mV	System Information	Peak-to-peak output ripple voltage
M1 PdSw	829.16 mW	Mosfet	M1 MOSFET switching losses
M1 PdCond	721.47 mW	Mosfet	M1 MOSFET conduction losses
M1 Pd	1.55 W	Mosfet	M1 MOSFET total power dissipation
M1 Tj	67.13 °C	Mosfet	M1 MOSFET junction temperature
FootPrint	NA	System Information	Total Foot Print Area of BOM components
Vout Actual	12.17 V	System Information	Vout Actual calculated based on selected voltage divider resistors
Vout Tolerance	3.31%	System Information	Vout Tolerance based on IC Tolerance (no load) and voltage divider resistor:
Vin	48 V	System Information	Vin operating point
Iout	10 A	System Information	Iout operating point
Cin Pd	9.82 mW	Power	Input capacitor power dissipation
Cout Pd	2.23 mW	Power	Output capacitor power dissipation
Diode Pd	6.97 W	Power	Diode power dissipation
L Pd	261.05 mW	Power	Inductor power dissipation
IC Pd	189.65 mW	Power	IC power dissipation
M1 PdSw	125.76 mW	Power	M1 MOSFET switching losses
M1 PdCond	549.26 mW	Power	M1 MOSFET conduction losses
M1 Pd	675.01 mW	Power	M1 MOSFET total power dissipation
Pd	8.82 W	Power	Total Power Dissipation

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s if applicable