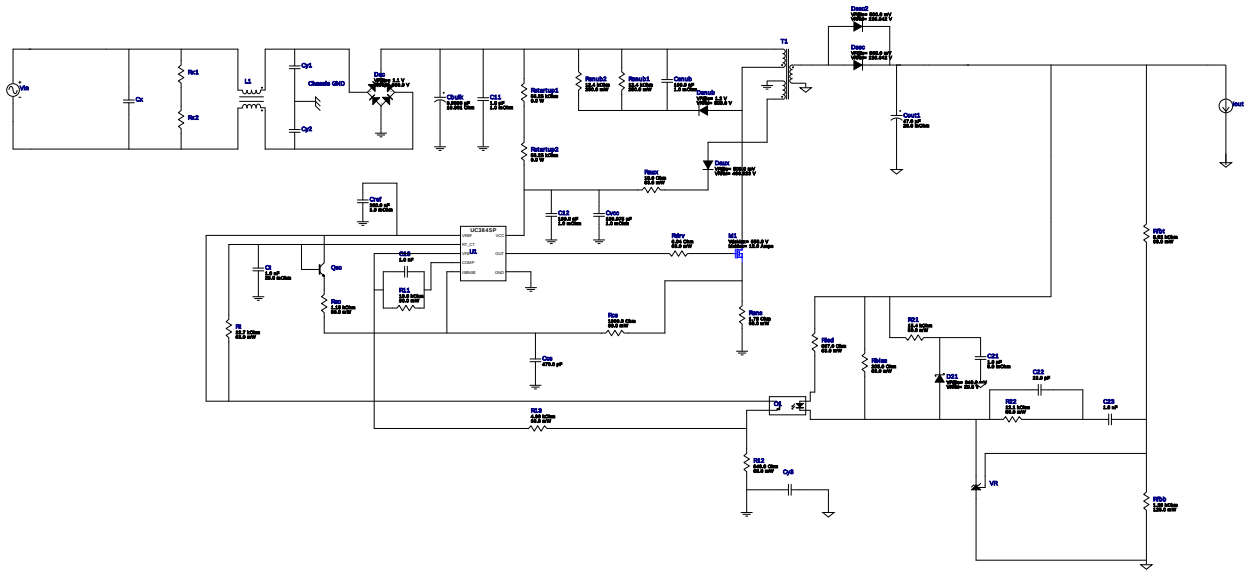
VinMin = 180.0V
VinMax = 350.0V
Vout = 5.0V
Iout = 1.0A

Device = UC3845N
Topology = Flyback
Created = 2019-08-09 21:21:42.353
BOM Cost = NA
BOM Count = 44
Total Pd = 1.52W

WEBENCH® Design Report

Design : 4 UC3845N
UC3845N 180V-350V to 5.00V @ 1A



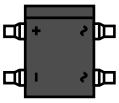
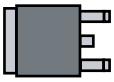
1. The EMI filter shown in the schematic is a placeholder. It has not yet been designed for the application.

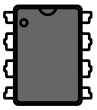
Design Alerts

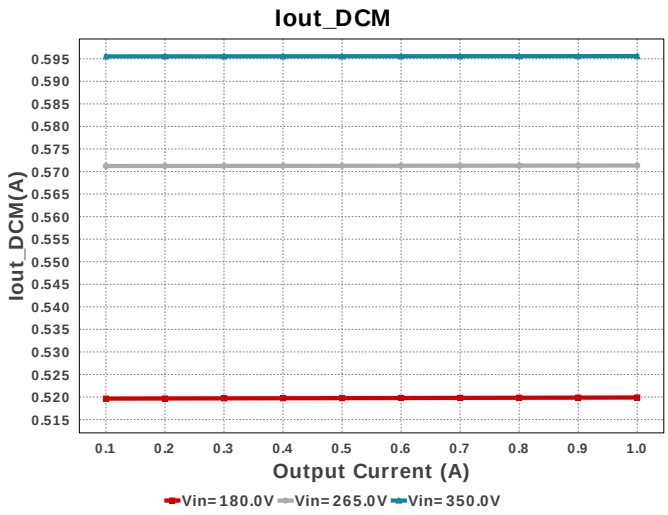
Component Selection Information
Click on the transformer symbol in the schematic and select "Explore Transformer Core/Bobbin Selection" to design using specific transformer cores and bobbin.

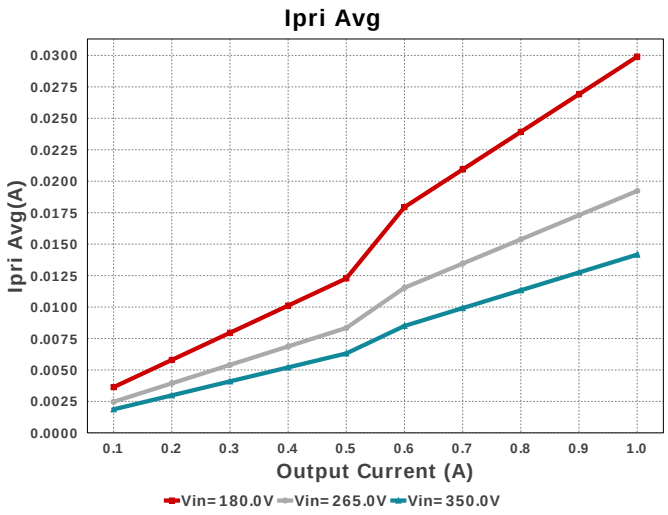
Electrical BOM

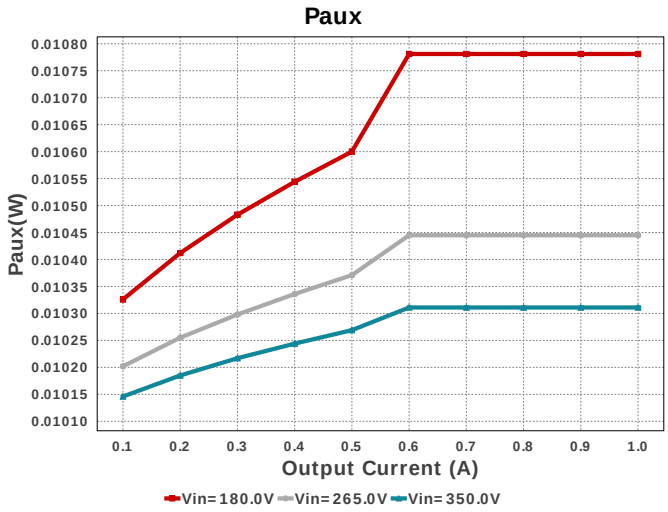
Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
C11	Knowles Capacitors	2220Y6300105KXTWS2 Series= X7R	Cap= 1.0 uF ESR= 1.0 mOhm VDC= 630.0 V IRMS= 0.0 A	1	$3.53	2220_450 54 mm^2
C12	MuRata	GRM155R71C104KA88D Series= X7R	Cap= 100.0 nF ESR= 1.0 mOhm VDC= 16.0 V IRMS= 0.0 A	1	$0.01	0402 3 mm^2
C13	MuRata	GRM1555C1H102JA01J Series= C0G/NP0	Cap= 1.0 nF VDC= 50.0 V IRMS= 0.0 A	1	$0.01	0402 3 mm^2
C21	Kemet	C0805C185K8PACTU Series= X5R	Cap= 1.8 uF ESR= 5.0 mOhm VDC= 10.0 V IRMS= 7.73 A	1	$0.10	0805 7 mm^2
C22	Samsung Electro-Mechanics	CL21C220JBANNNC Series= C0G/NP0	Cap= 22.0 pF VDC= 50.0 V IRMS= 0.0 A	1	$0.01	0805 7 mm^2
C23	TDK	CGA4C2C0G1H182J060AA Series= C0G/NP0	Cap= 1.8 nF VDC= 50.0 V IRMS= 0.0 A	1	$0.03	0805 7 mm^2
Cbulk	CUSTOM	CUSTOM Series= ?	Cap= 3.9886 uF ESR= 10.3013 Ohm VDC= 519.72 V IRMS= 67.404 mA	1	NA	CUSTOM 0 mm^2

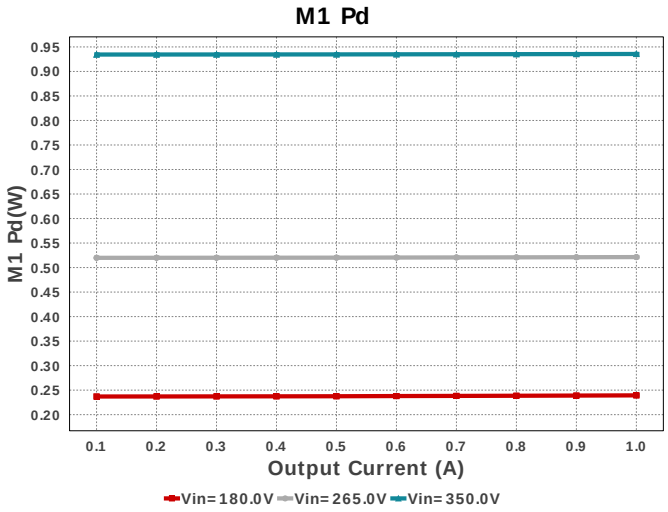
Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
Ccs	AVX	04025A471JAT2A Series= C0G/NP0	Cap= 470.0 pF VDC= 50.0 V IRMS= 0.0 A	1	$0.01	 0402 3 mm²
Cout1	Chemi-Con	APXE100ARA470ME61G Series= PXE	Cap= 47.0 uF ESR= 28.0 mOhm VDC= 10.0 V IRMS= 2.31 A	1	$0.39	 CAPSMT_62_E61 53 mm²
Cref	MuRata	GRM155R71C104KA88D Series= X7R	Cap= 100.0 nF ESR= 1.0 mOhm VDC= 16.0 V IRMS= 0.0 A	1	$0.01	 0402 3 mm²
Csnub	TDK	C3216X7T2W104K160AA Series= X7T	Cap= 100.0 nF ESR= 1.0 mOhm VDC= 450.0 V IRMS= 0.0 A	1	$0.19	 1206_190 11 mm²
Ct	Kemet	C0805C102J1GACTU Series= C0G/NP0	Cap= 1.0 nF ESR= 25.0 mOhm VDC= 100.0 V IRMS= 1.71 A	1	$0.09	 0805 7 mm²
Cvcc	CUSTOM	CUSTOM Series= ?	Cap= 159.375 uF ESR= 1.0 mOhm VDC= 19.372 V	1	NA	CUSTOM 0 mm²
D21	Fairchild Semiconductor	MBR1020VL	VF@Io= 340.0 mV VRRM= 20.0 V	1	$0.04	 SOD-123F 12 mm²
Dac	Vishay-Semiconductor	DF08SA	VF@Io= 1.1 V VRRM= 800.0 V	1	$0.24	 DF-S 99 mm²
Daux	CUSTOM	CUSTOM	VF@Io= 500.0 mV VRRM= 496.023 V	1	NA	CUSTOM 0 mm²
Dsec	CUSTOM	CUSTOM	VF@Io= 500.0 mV VRRM= 226.642 V	1	NA	CUSTOM 0 mm²
Dsec2	CUSTOM	CUSTOM	VF@Io= 500.0 mV VRRM= 226.642 V	1	NA	CUSTOM 0 mm²
Dsnub	Microsemi	UFS180JE3/TR13	VF@Io= 1.2 V VRRM= 800.0 V	1	$0.73	 DO-214BA 42 mm²
M1	STMicroelectronics	STD16N65M5	VdsMax= 650.0 V IdsMax= 12.0 Amps	1	$2.13	 DPAK 102 mm²
O1	Vishay-Semiconductor	TCMT1109	Optocoupler	1	$0.21	 SOP-4 44 mm²
Qsc	STMicroelectronics	2N2222A	Bipolar Transistor	1	$1.11	 TO-18 57 mm²
R11	Yageo	RC0201FR-0710KL Series= ?	Res= 10.0 kOhm Power= 50.0 mW Tolerance= 1.0%	1	$0.01	 0201 2 mm²
R12	Vishay-Dale	CRCW0402649RFKED Series= CRCW..e3	Res= 649.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	 0402 3 mm²
R13	Vishay-Dale	CRCW04024K99FKED Series= CRCW..e3	Res= 4.99 kOhm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	 0402 3 mm²
R21	Yageo	RC0201FR-0715K4L Series= ?	Res= 15.4 kOhm Power= 50.0 mW Tolerance= 1.0%	1	$0.01	 0201 2 mm²

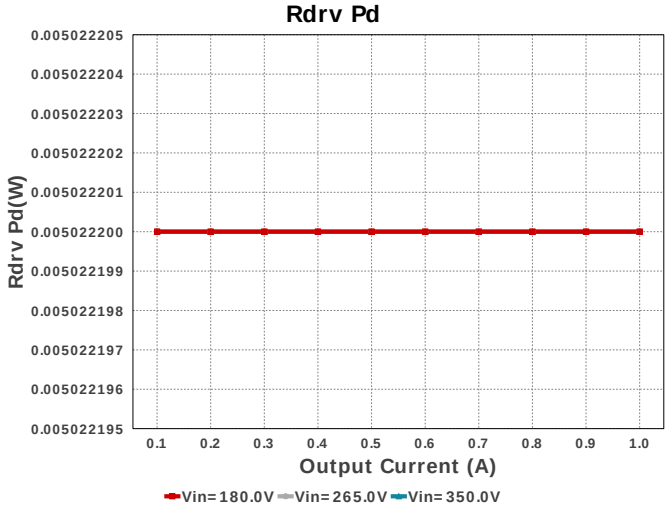
Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
R22	Yageo	RC0201FR-0712K1L Series= ?	Res= 12.1 kOhm Power= 50.0 mW Tolerance= 1.0%	1	$0.01	0201 2 mm²
Raux	Vishay-Dale	CRCW040210R0FKED Series= CRCW..e3	Res= 10.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rbias	Vishay-Dale	CRCW0402205RFKED Series= CRCW..e3	Res= 205.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rcs	Vishay-Dale	CRCW04021K00FKED Series= CRCW..e3	Res= 1000.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rdrv	Vishay-Dale	CRCW04026R04FKED Series= CRCW..e3	Res= 6.04 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rfbb	Yageo	RT0805BRD071K29L Series= RT0805	Res= 1.29 kOhm Power= 125.0 mW Tolerance= 0.1%	1	$0.05	0805 7 mm²
Rfbt	Vishay-Dale	CRCW04023K92FKED Series= CRCW..e3	Res= 3.92 kOhm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rled	Vishay-Dale	CRCW0402887RFKED Series= CRCW..e3	Res= 887.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rsc	Vishay-Dale	CRCW04021K15FKED Series= CRCW..e3	Res= 1.15 kOhm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rsns	Vishay-Dale	CRCW04021R78FKED Series= CRCW..e3	Res= 1.78 Ohm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
Rsnub1	Vishay-Dale	CRCW120612K4FKEA Series= CRCW..e3	Res= 12.4 kOhm Power= 250.0 mW Tolerance= 1.0%	1	$0.01	1206 11 mm²
Rsnub2	Vishay-Dale	CRCW120612K4FKEA Series= CRCW..e3	Res= 12.4 kOhm Power= 250.0 mW Tolerance= 1.0%	1	$0.01	1206 11 mm²
Rstartup1	CUSTOM	CUSTOM Series= ?	Res= 55.25 kOhm Power= 0.0 W Tolerance= 0.0%	1	NA	CUSTOM 0 mm²
Rstartup2	CUSTOM	CUSTOM Series= ?	Res= 55.25 kOhm Power= 0.0 W Tolerance= 0.0%	1	NA	CUSTOM 0 mm²
Rt	Vishay-Dale	CRCW040213K7FKED Series= CRCW..e3	Res= 13.7 kOhm Power= 63.0 mW Tolerance= 1.0%	1	$0.01	0402 3 mm²
T1	Core=Wurth Elektronik , CoilFormer=Wurth Elektronik	Core=150-2623 , CoilFormer=070-2255	Lp= 1.282 mH Turns Ratio(Nas)= 22:10 Turns Ratio(Nps)= 42:10 Npri= 42.0 Naux= 22.0 Nsec= 10.0	1	NA	 TDK_B65803 556 mm²
U1	Texas Instruments	UC3845N	Switcher	1	$0.54	 P0008A 116 mm²
VR	Texas Instruments	LMV431CM5/NOPB	Voltage References	1	$0.16	 R-PDSO-G3 16 mm²

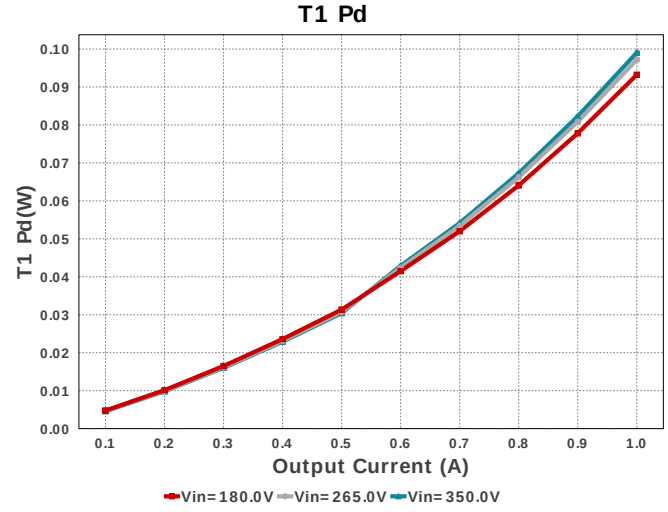


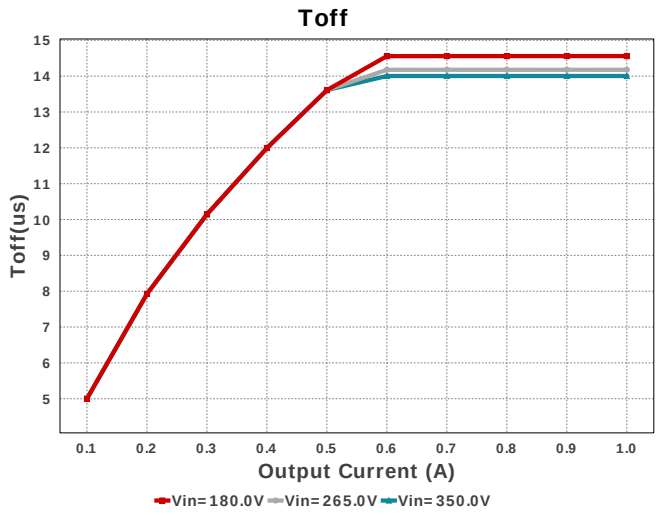


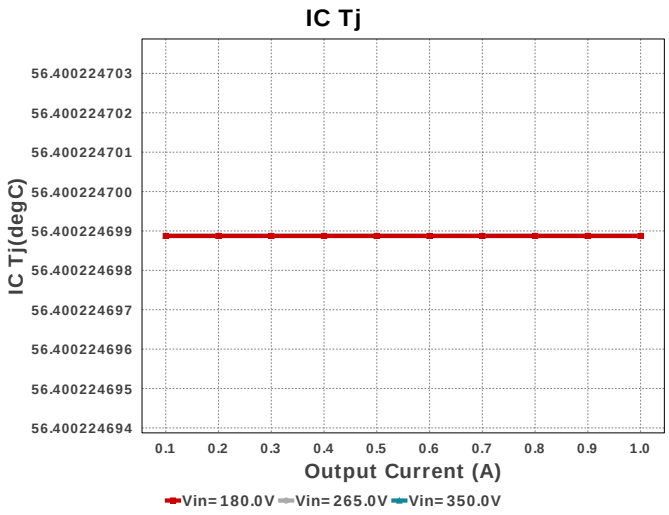


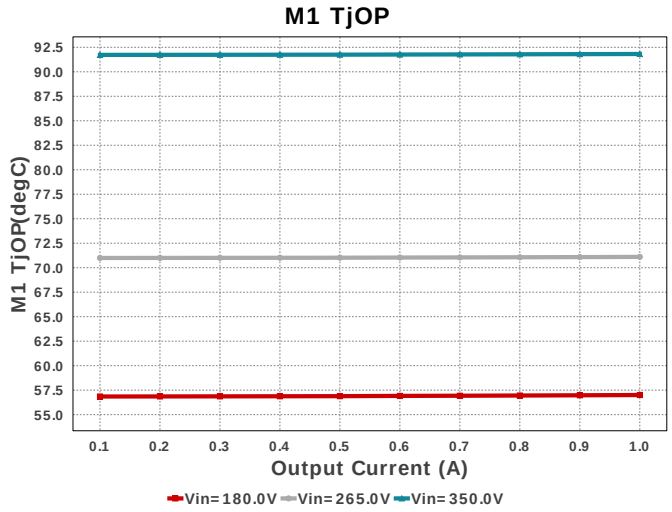


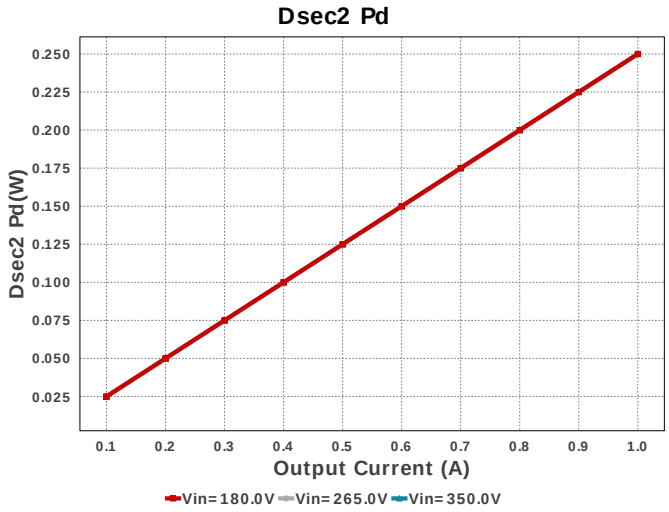


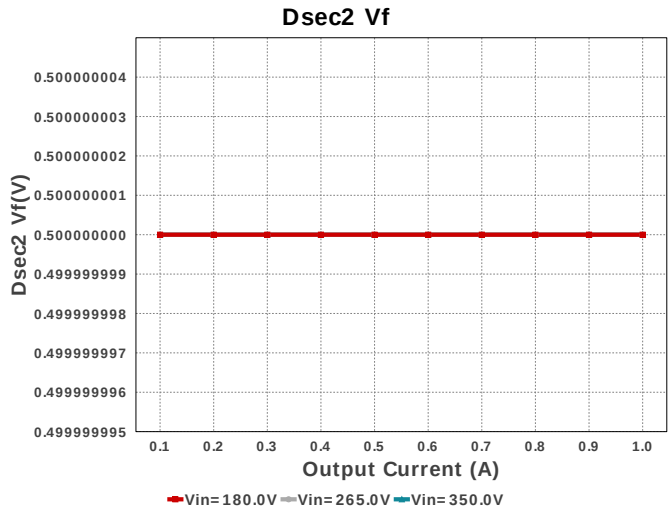


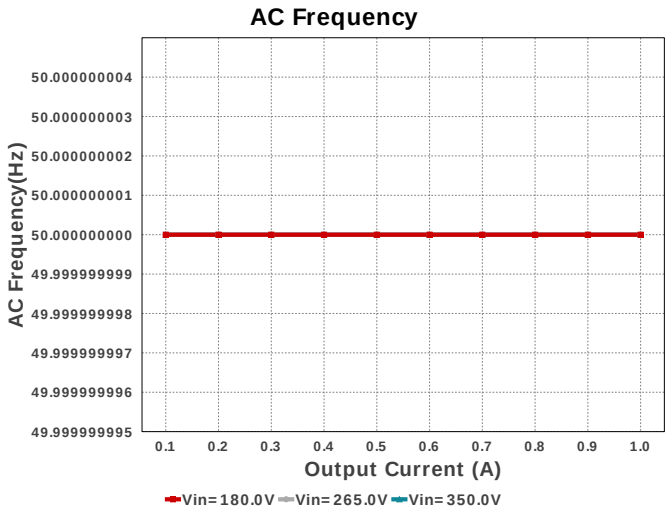


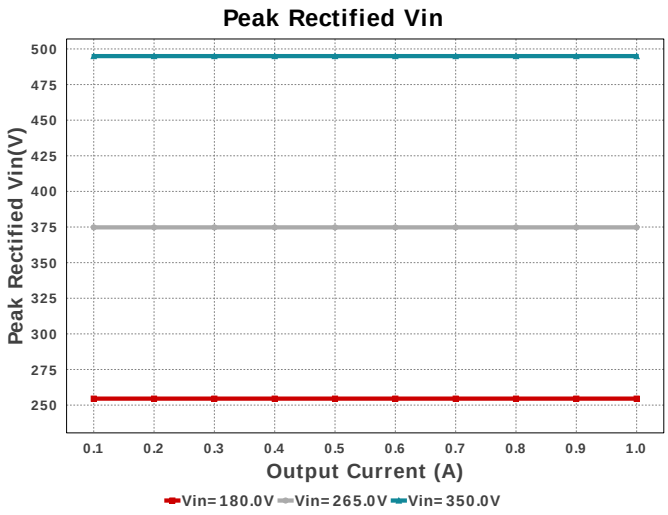


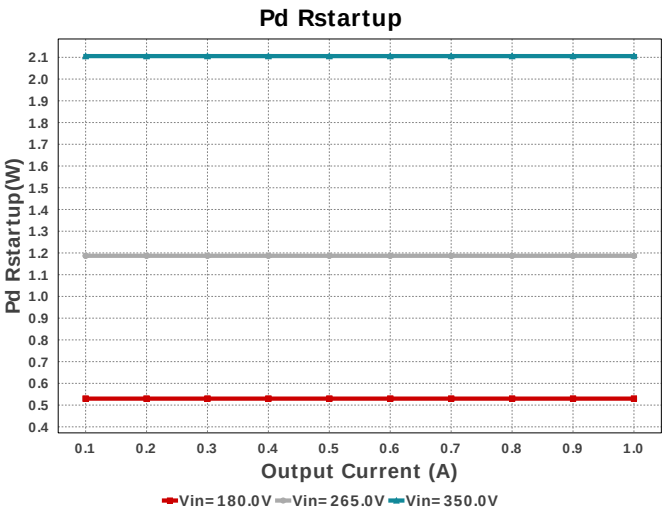


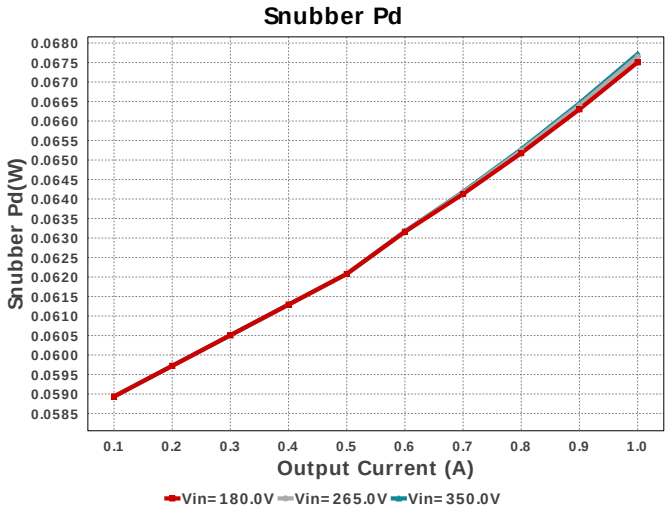


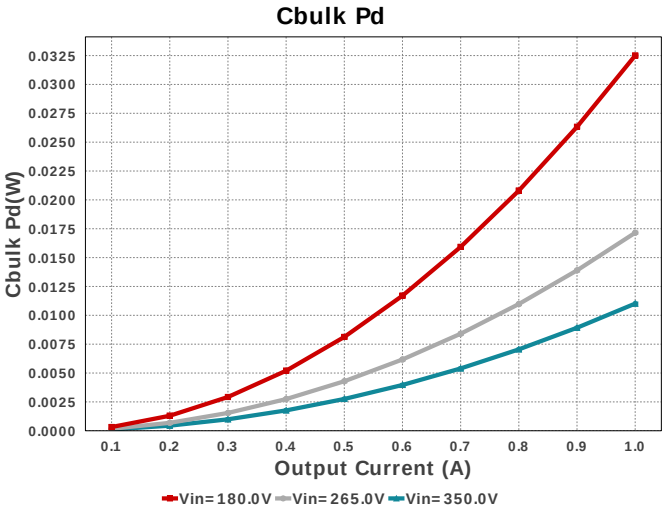


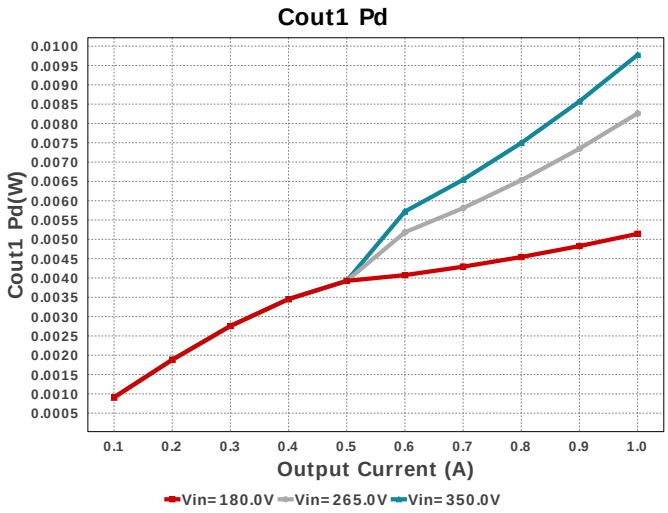


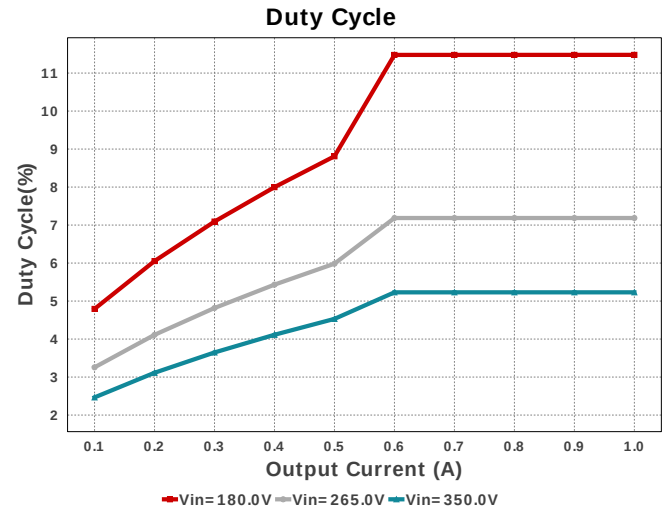

Peak Rectified Vin
Peak Rectified Vin(V)
500
475
450
425
400
375
350
325
300
275
250
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

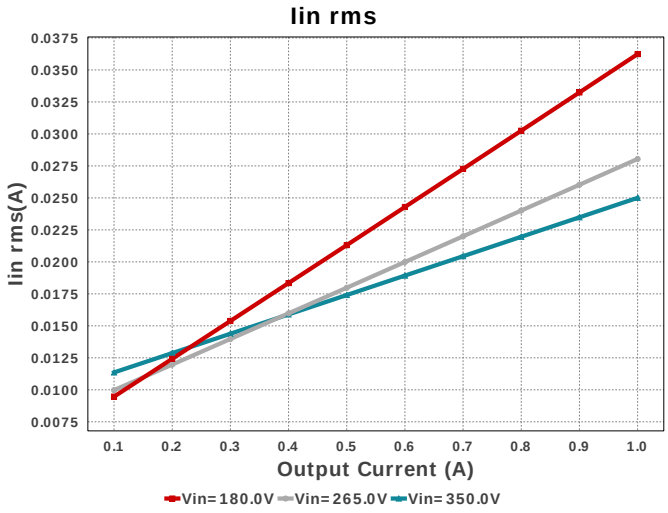

Pd Rstartup
Pd Rstartup(W)
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

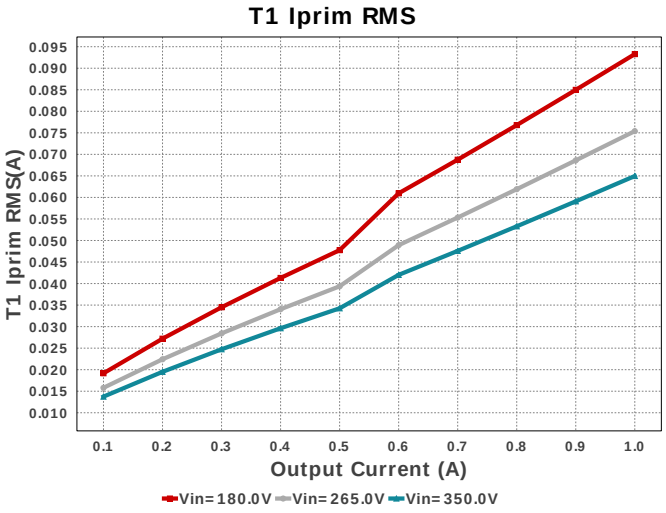

Snubber Pd
Snubber Pd(W)
0.0680
0.0675
0.0670
0.0665
0.0660
0.0655
0.0650
0.0645
0.0640
0.0635
0.0630
0.0625
0.0620
0.0615
0.0610
0.0605
0.0600
0.0595
0.0590
0.0585
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

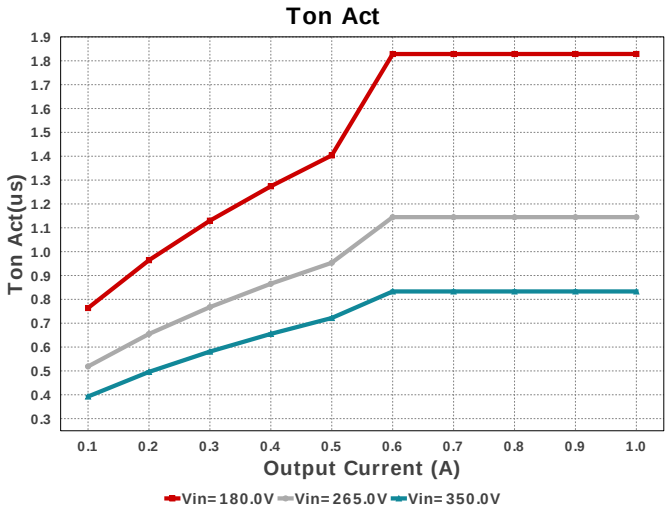

Cbulk Pd
Cbulk Pd(W)
0.0325
0.0300
0.0275
0.0250
0.0225
0.0200
0.0175
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

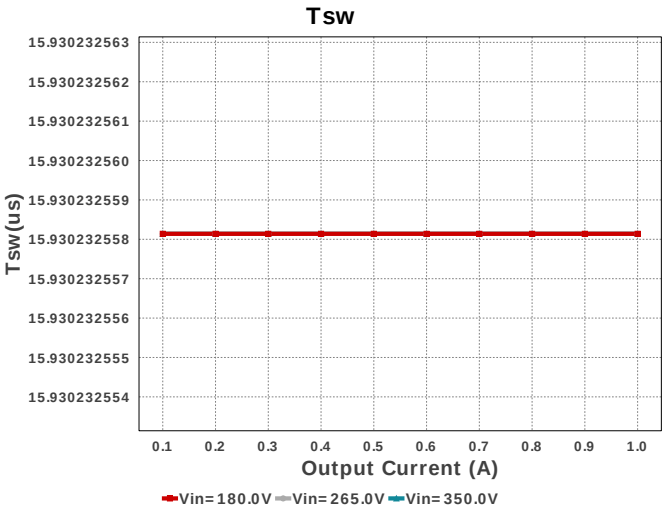

Cout1 Pd
Cout1 Pd(W)
0.0100
0.0095
0.0090
0.0085
0.0080
0.0075
0.0070
0.0065
0.0060
0.0055
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

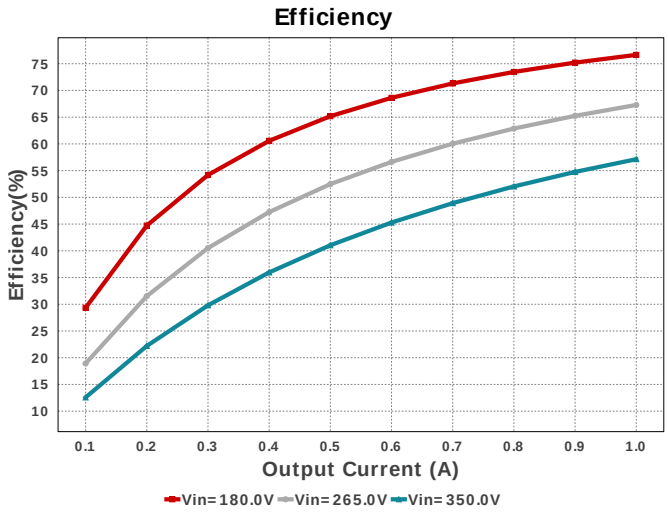

Duty Cycle
Duty Cycle(%)
11
10
9
8
7
6
5
4
3
2
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Output Current (A)
Vin=180.0V Vin=265.0V Vin=350.0V

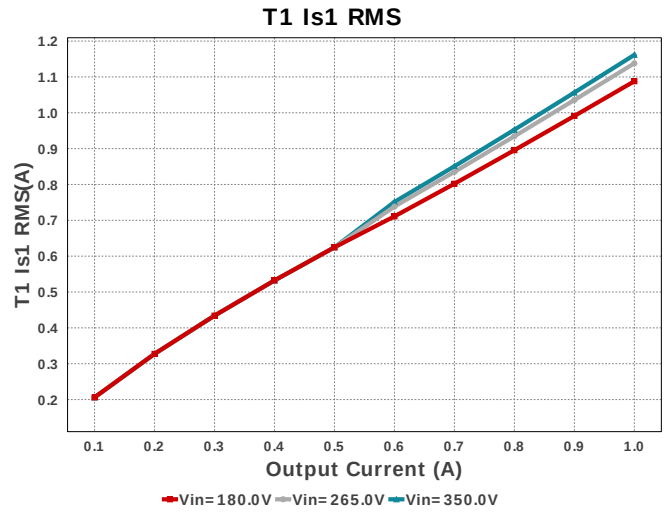


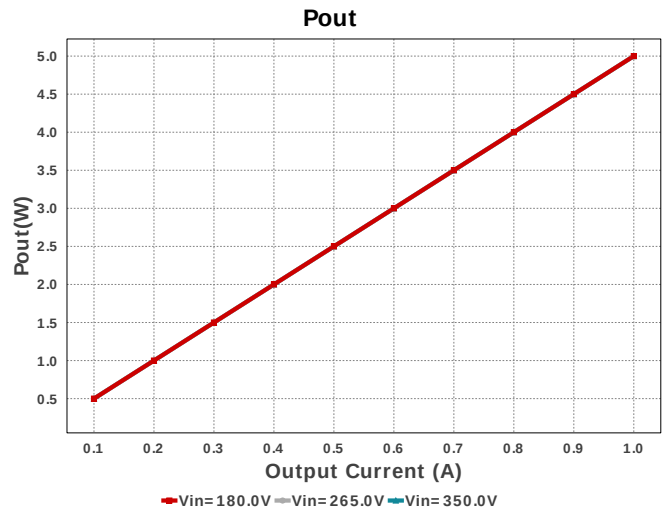


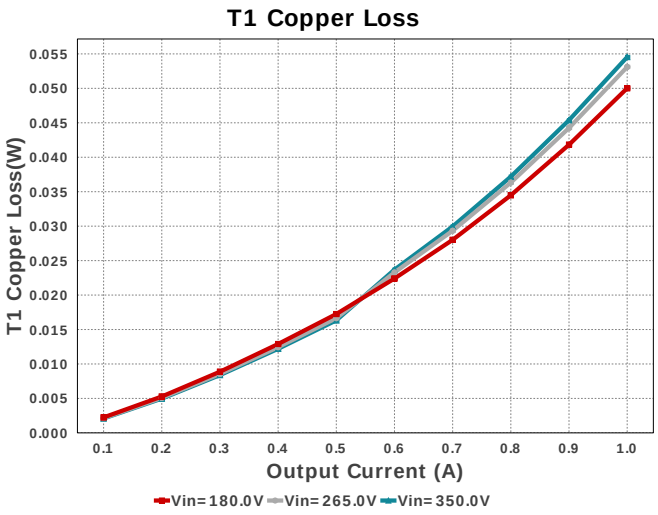


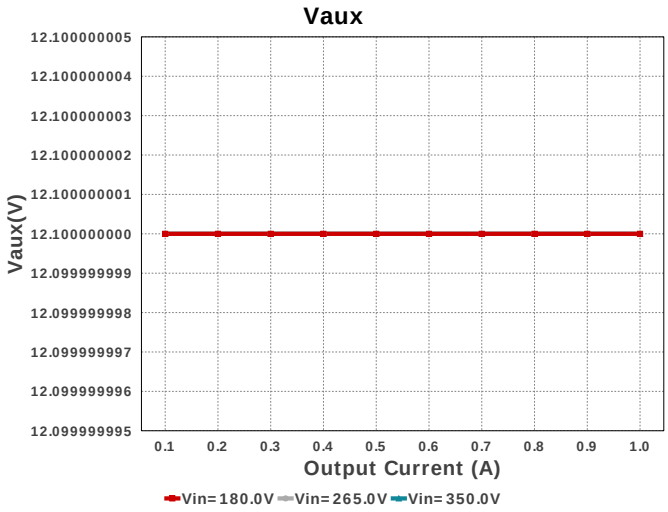


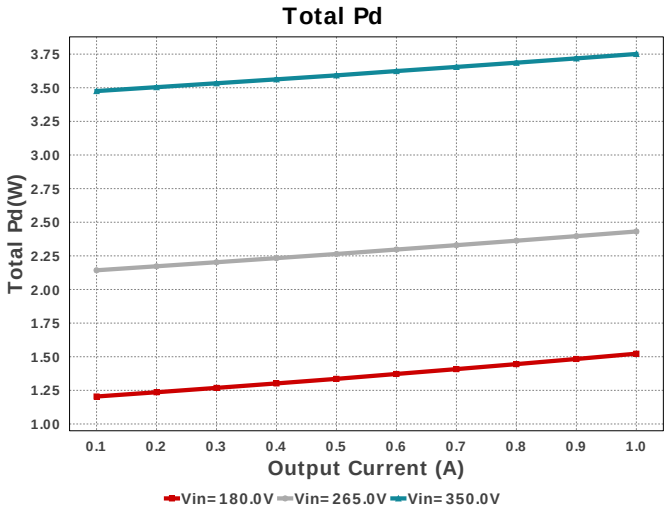


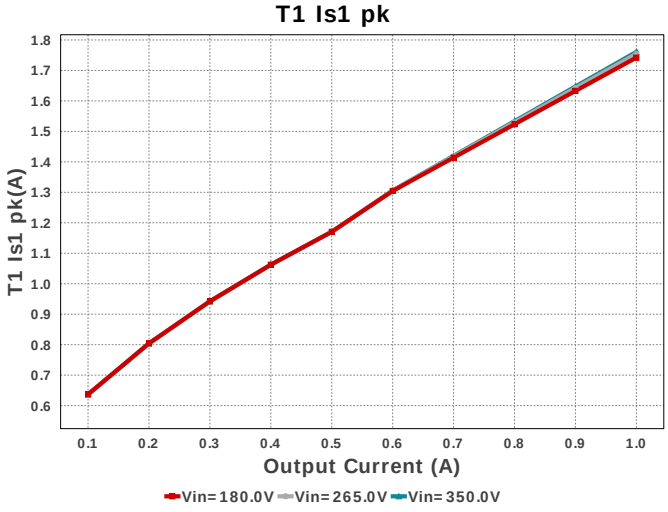


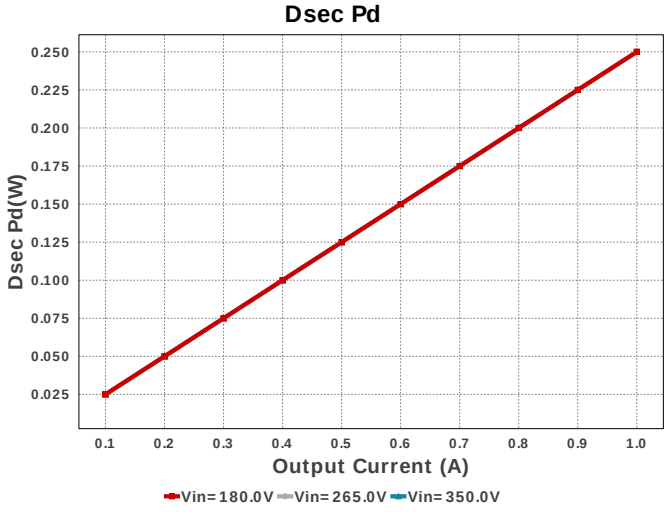


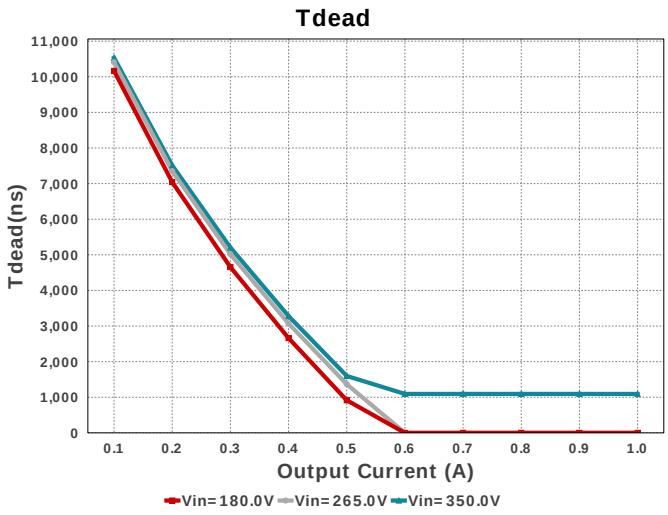


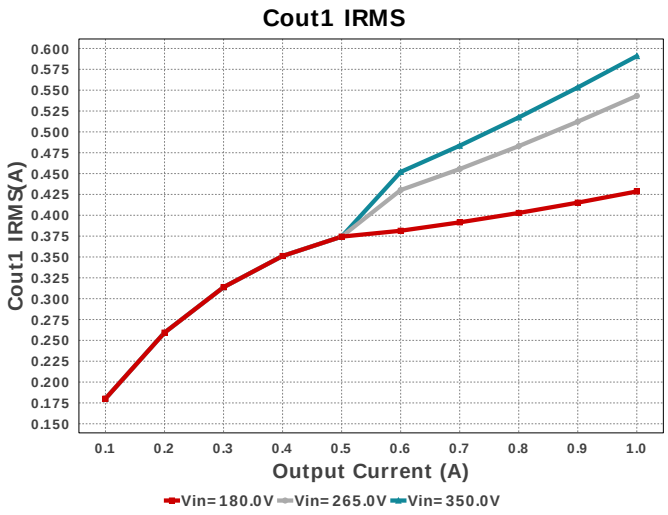


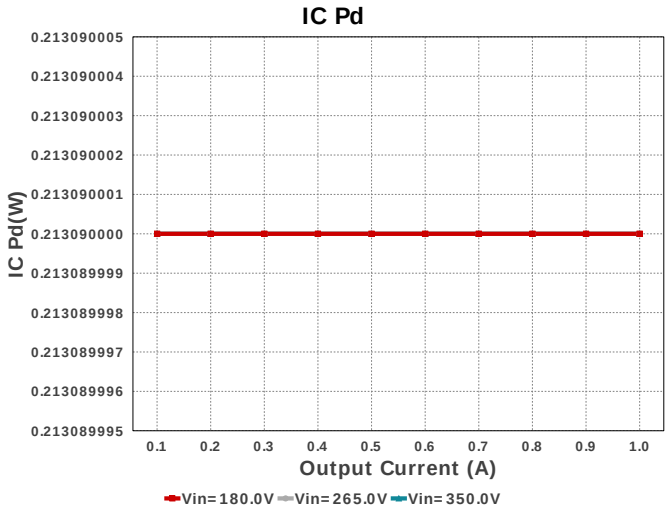


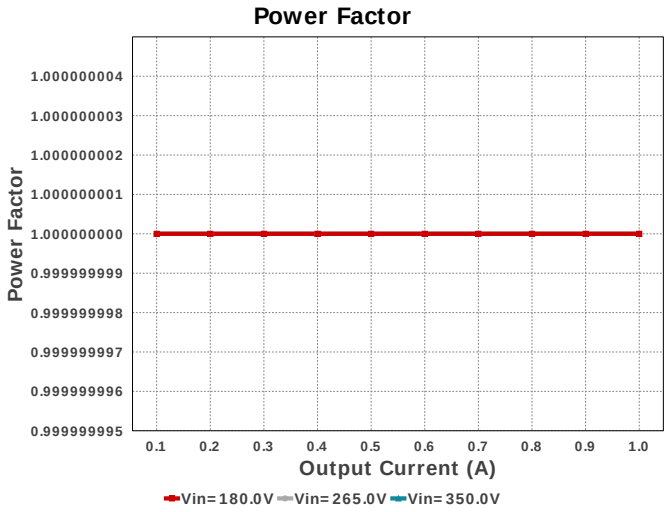


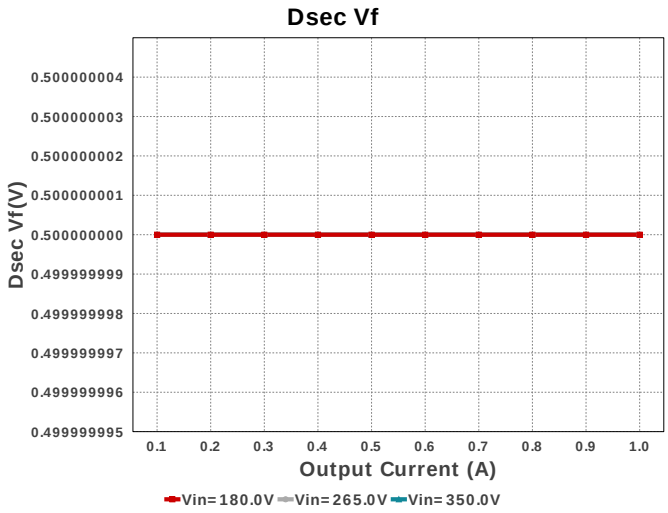


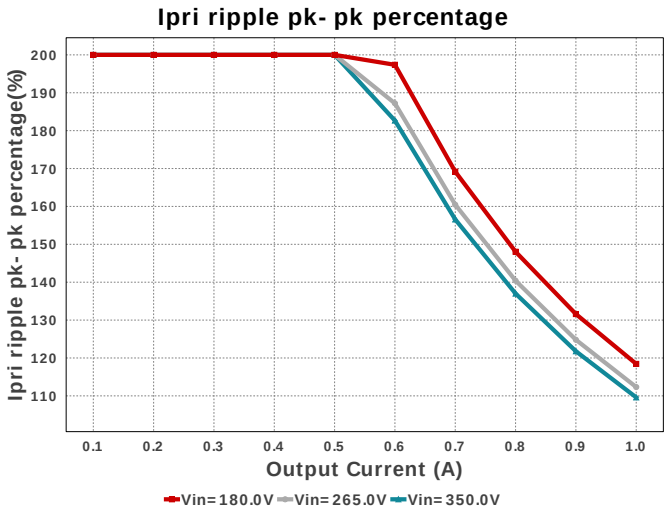


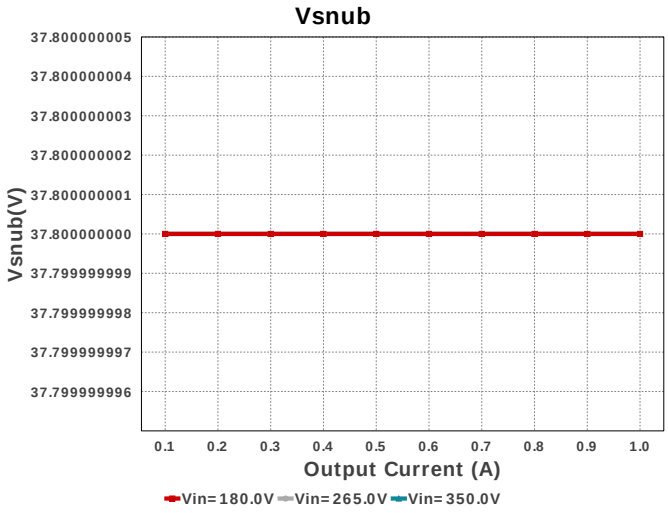


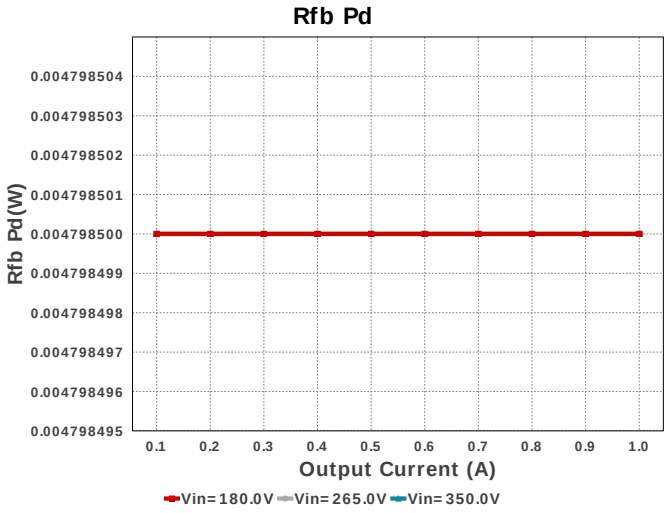


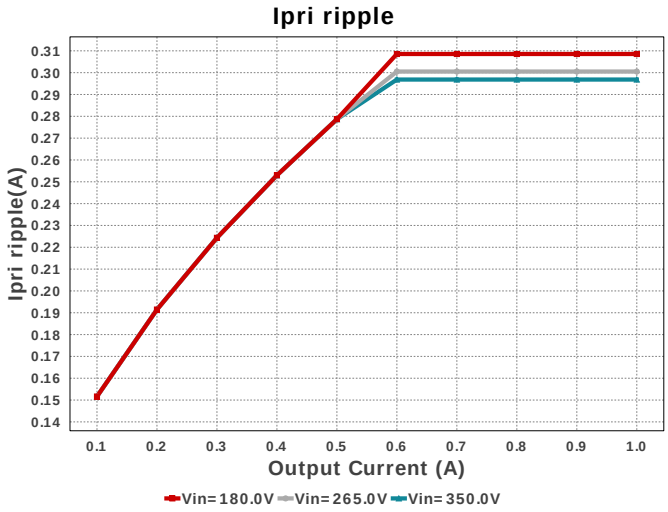


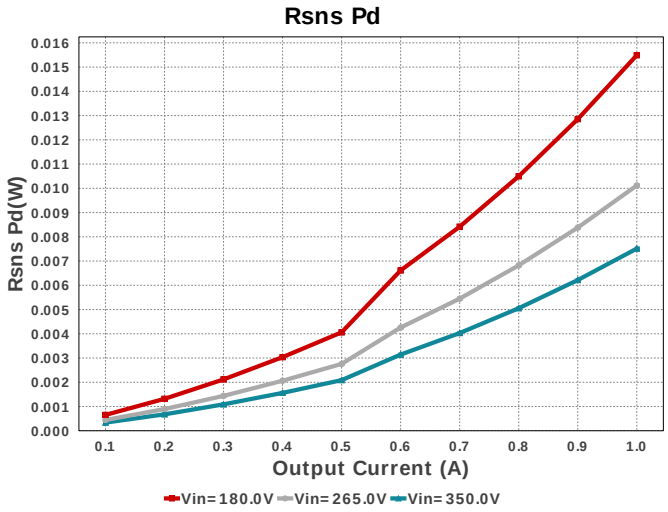


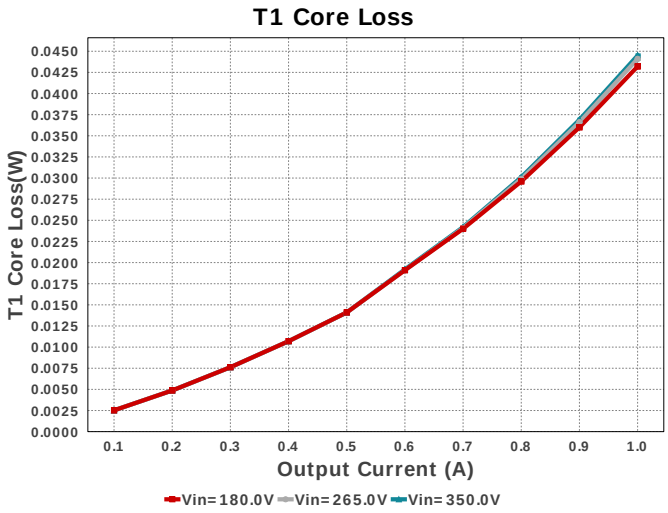


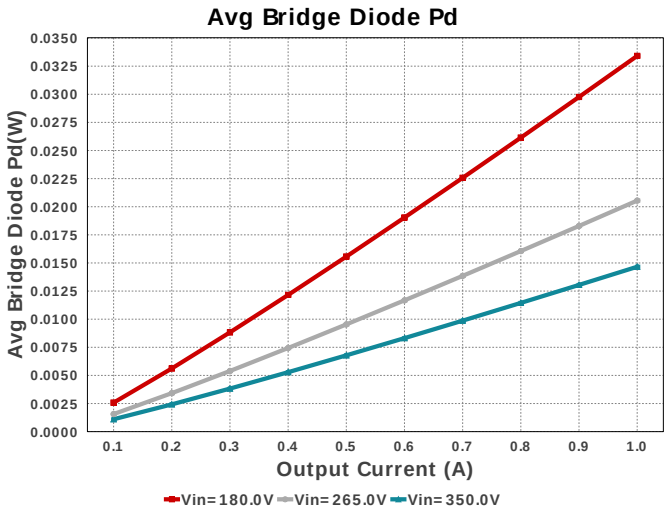


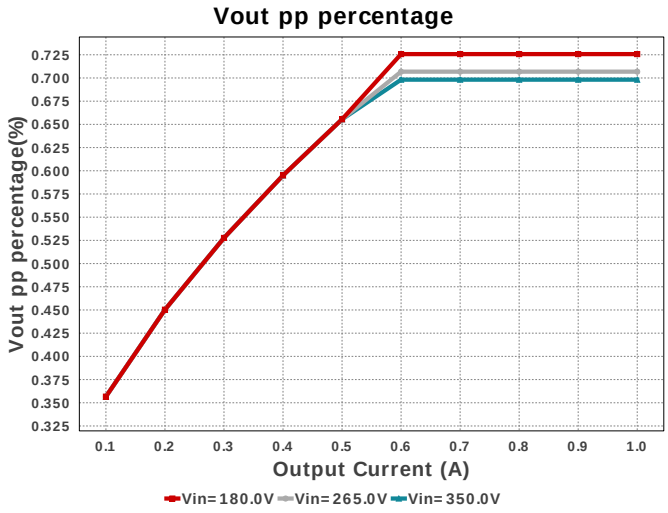


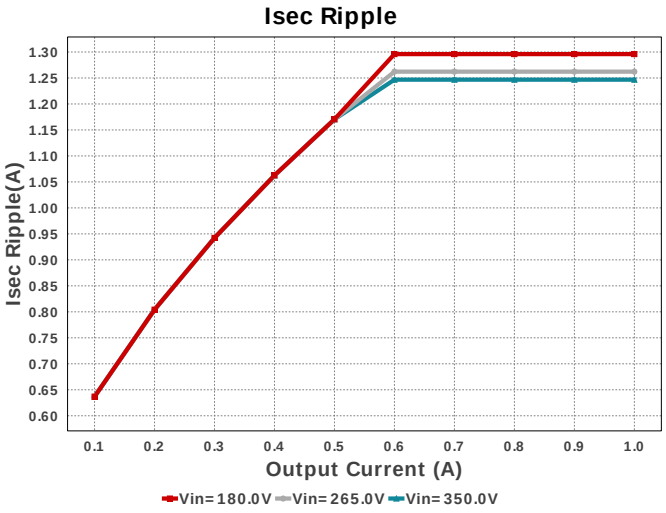


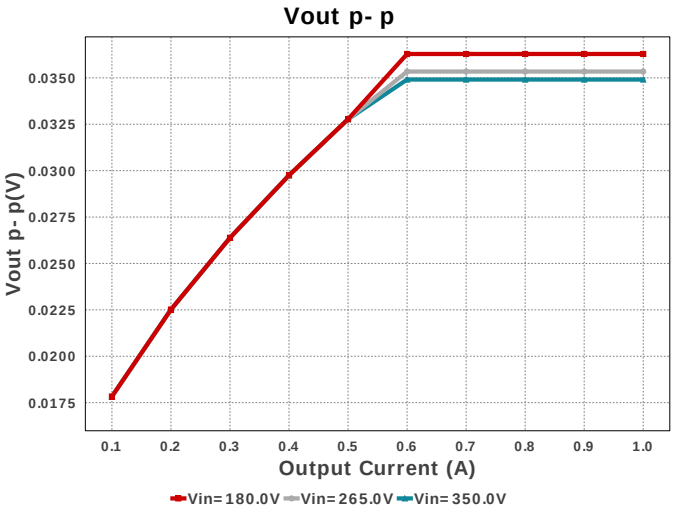


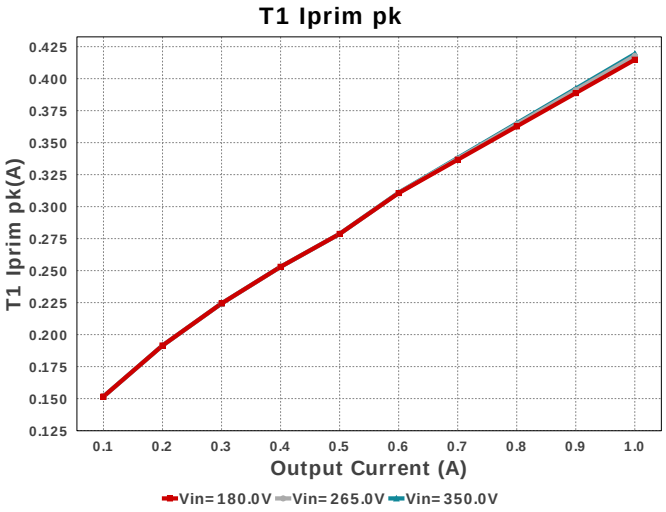












Operating Values

#	Name	Value	Category	Description
1.	Cbulk Pd	32.502 mW	Capacitor	Bulk capacitor power dissipation
2.	Cout1 IRMS	428.565 mA	Capacitor	Output capacitor1 RMS ripple current
3.	Cout1 Pd	5.143 mW	Capacitor	Output capacitor1 power dissipation
4.	Avg Bridge Diode Pd	33.412 mW	Diode	Average Power Dissipation in the Bridge Diode over the AC Line Period
5.	Daux trr	0.0 ns	Diode	Auxiliary Diode Reverse Recovery Time
6.	Dsec Pd	250.0 mW	Diode	Secondary Diode Power Dissipation
7.	Dsec Vf	500.0 mV	Diode	Effective Forward Voltage Drop at the Operating Current
8.	Dsec trr	0.0 ns	Diode	Output Diode Reverse Recovery Time
9.	Dsec2 Pd	250.0 mW	Diode	Secondary Diode Power Dissipation
10.	Dsec2 Vf	500.0 mV	Diode	Effective Forward Voltage Drop at the Operating Current
11.	Dsnub trr	60.0 ns	Diode	Snubber Diode Reverse Recovery Time
12.	IC Pd	213.09 mW	IC	IC power dissipation
13.	IC Tj	56.4 degC	IC	IC junction temperature
14.	ICThetaJA	53.5 degC/W	IC	IC junction-to-ambient thermal resistance
15.	M1 Pd	239.32 mW	Mosfet	M1 MOSFET total power dissipation
16.	M1 TjOP	57.003 degC	Mosfet	M1 MOSFET junction temperature
17.	Avg Bridge Diode Pd	33.412 mW	Power	Average Power Dissipation in the Bridge Diode over the AC Line Period
18.	Cbulk Pd	32.502 mW	Power	Bulk capacitor power dissipation
19.	Cout1 Pd	5.143 mW	Power	Output capacitor1 power dissipation
20.	Dsec Pd	250.0 mW	Power	Secondary Diode Power Dissipation
21.	Dsec2 Pd	250.0 mW	Power	Secondary Diode Power Dissipation
22.	IC Pd	213.09 mW	Power	IC power dissipation
23.	M1 Pd	239.32 mW	Power	M1 MOSFET total power dissipation
24.	Paux	10.781 mW	Power	Power Dissipation in Raux and Daux
25.	Pd Rstartup	529.8 mW	Power	Power Dissipation in Rstartup1 and Rstartup2
26.	Rdrv Pd	5.022 mW	Power	Power Dissipation in Gate Drive Resistor
27.	Rfb Pd	4.798 mW	Power	Rfb Power Dissipation
28.	Rsns Pd	15.489 mW	Power	Current Limit Sense Resistor Power Dissipation
29.	Snubber Pd	67.505 mW	Power	Snubber Power Dissipation
30.	T1 Copper Loss	50.016 mW	Power	Transformer Copper Loss Power Dissipation
31.	T1 Core Loss	43.2 mW	Power	Transformer Core Loss Power Dissipation
32.	T1 Pd	93.216 mW	Power	Estimated Losses in Transformer

#	Name	Value	Category	Description
33.	Total Pd	1.523 W	Power	Total Power Dissipation
34.	Pd Rstartup	529.8 mW	Resistor	Power Dissipation in Rstartup1 and Rstartup2
35.	Rdrv Pd	5.022 mW	Resistor	Power Dissipation in Gate Drive Resistor
36.	Rfb Pd	4.798 mW	Resistor	Rfb Power Dissipation
37.	Rsns Pd	15.489 mW	Resistor	Current Limit Sense Resistor Power Dissipation
38.	AC Frequency	50.0 Hz	System Information	Input AC frequency
39.	BOM Count	44	System Information	Total Design BOM count
40.	Duty Cycle	11.479 %	System Information	Duty cycle
41.	Efficiency	76.656 %	System Information	Steady state efficiency
42.	FootPrint	1.303 k mm^2	System Information	Total Foot Print Area of BOM components
43.	Frequency	62.774 kHz	System Information	Switching frequency
44.	Iin rms	36.237 mA	System Information	RMS Input Current
45.	Iout	1.0 A	System Information	Iout operating point
46.	Iout_DCM	519.888 mA	System Information	Approximate Current below which DCM mode of operation will begin
47.	Mode	CCM	System Information	Conduction Mode
48.	Peak Rectified Vin	254.556 V	System Information	Peak voltage seen at rectified input
49.	Pout	5.0 W	System Information	Total output power
50.	Power Factor	1.0	System Information	Assumed Power Factor for the Application
51.	Tdead	0.0 ns	System Information	Approximate Dead Time of the Regulator
52.	Toff	14.559 us	System Information	Approximate Converter Off Time
53.	Ton Act	1.829 us	System Information	Approximate Converter On Time
54.	Total BOM	NA	System Information	Total BOM Cost
55.	Tsw	15.93 us	System Information	Switching Time Period
56.	Vin_RMS	180.0 V	System Information	Vin operating point
57.	Vout	5.0 V	System Information	Operational Output Voltage
58.	Vout Actual	5.008 V	System Information	Vout Actual calculated based on selected voltage divider resistors
59.	Vout Tolerance	1.479 %	System Information	Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable
60.	Vout p-p	36.286 mV	System Information	Peak-to-peak output ripple voltage
61.	Vout pp percentage	725.727 m%	System Information	Output Voltage ripple percentage
62.	Vsnub	37.8 V	System Information	Voltage Across the Snubber
63.	Ipri Avg	29.905 mA	Transformer	Average Current in Primary Winding over the complete Switching Period
64.	Ipri ripple	308.557 mA	Transformer	Ripple Current in the Primary Winding
65.	Ipri ripple pk-pk percentage	118.441 %	Transformer	Primary Current pk-pk ripple percentage(of Ipri avg during ton only)
66.	Isec Ripple	1.296 A	Transformer	Ripple Current in the Secondary Winding
67.	Paux	10.781 mW	Transformer	Power Dissipation in Raux and Daux
68.	T1 Copper Loss	49.211 mW	Transformer	Transformer Copper Loss Power Dissipation
69.	T1 Core Loss	35.3 mW	Transformer	Transformer Core Loss Power Dissipation
70.	T1 Iprim RMS	93.282 mA	Transformer	Transformer Primary RMS Current
71.	T1 Iprim pk	414.795 mA	Transformer	Transformer Primary Peak Current
72.	T1 Is1 RMS	1.088 A	Transformer	Transformer Secondary1 RMS Current
73.	T1 Is1 pk	1.742 A	Transformer	Transformer Secondary1 Peak Current
74.	T1 Pd	84.511 mW	Transformer	Estimated Losses in Transformer
75.	Vaux	12.1 V	Transformer	Auxiliary Voltage

Design Inputs

Name	Value	Description
Iout	1.0	Maximum Output Current
VinMax	350.0	Maximum input voltage

Name	Value	Description
VinMin	180.0	Minimum input voltage
Vout	5.0	Output Voltage
acFrequency	50.0	AC Frequency
base_pn	UC3845	Base Product Number
source	AC	Input Source Type
Ta	45.0	Ambient temperature

WEBENCH® Assembly

Component Testing

Some published data on components in datasheets such as Capacitor ESR and Inductor DC resistance is based on conservative values that will guarantee that the components always exceed the specification. For design purposes it is usually better to work with typical values. Since this data is not always available it is a good practice to measure the Capacitance and ESR values of Cin and Cout, and the inductance and DC resistance of L1 before assembly of the board. Any large discrepancies in values should be electrically simulated in WEBENCH to check for instabilities and thermally simulated in WebTHERM to make sure critical temperatures are not exceeded.

Soldering Component to Board

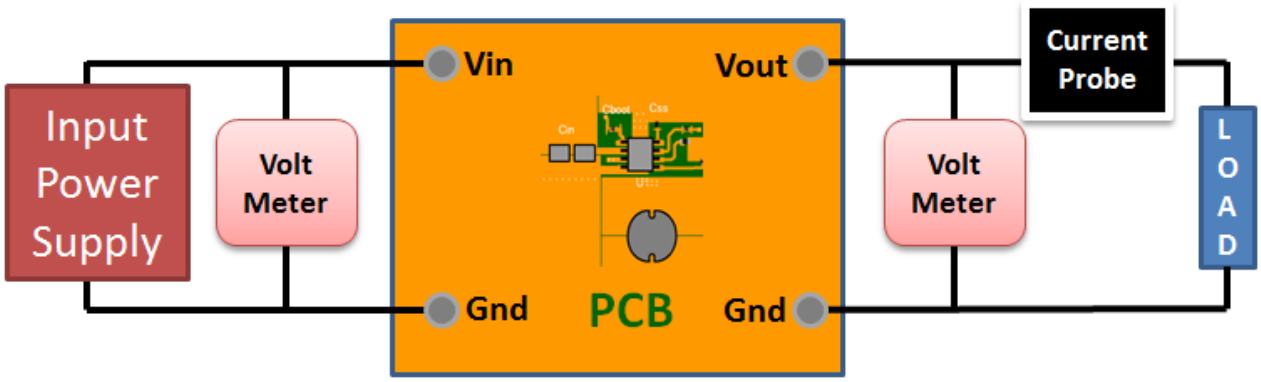
If board assembly is done in house it is best to tack down one terminal of a component on the board then solder the other terminal. For surface mount parts with large tabs, such as the DPAK, the tab on the back of the package should be pre-tinned with solder, then tacked into place by one of the pins. To solder the tab town to the board place the iron down on the board while resting against the tab, heating both surfaces simultaneously. Apply light pressure to the top of the plastic case until the solder flows around the part and the part is flush with the PCB. If the solder is not flowing around the board you may need a higher wattage iron (generally 25W to 30W is enough).

Initial Startup of Circuit

It is best to initially power up the board by setting the input supply voltage to the lowest operating input voltage 180.0V and set the input supply's current limit to zero. With the input supply off connect up the input supply to Vin and GND. Connect a digital volt meter and a load if needed to set the minimum Iout of the design from Vout and GND. Turn on the input supply and slowly turn up the current limit on the input supply. If the voltage starts to rise on the input supply continue increasing the input supply current limit while watching the output voltage. If the current increases on the input supply, but the voltage remains near zero, then there may be a short or a component misplaced on the board. Power down the board and visually inspect for solder bridges and recheck the diode and capacitor polarities. Once the power supply circuit is operational then more extensive testing may include full load testing, transient load and line tests to compare with simulation results.

Load Testing

The setup is the same as the initial startup, except that an additional digital voltmeter is connected between Vin and GND, a load is connected between Vout and GND and a current meter is connected in series between Vout and the load. The load must be able to handle at least rated output power + 50% (7.5 watts for this design). Ideally the load is supplied in the form of a variable load test unit. It can also be done in the form of suitably large power resistors. When using an oscilloscope to measure waveforms on the prototype board, the ground leads of the oscilloscope probes should be as short as possible and the area of the loop formed by the ground lead should be kept to a minimum. This will help reduce ground lead inductance and eliminate EMI noise that is not actually present in the circuit.



WEBENCH® Transformer Report

#	Name	Value
1.	Core Part Number	150-2623
2.	Core Manufacturer	Wurth Elektronik
3.	Coil Former Part Number	070-2255
4.	Coil Former Manufacturer	Wurth Elektronik

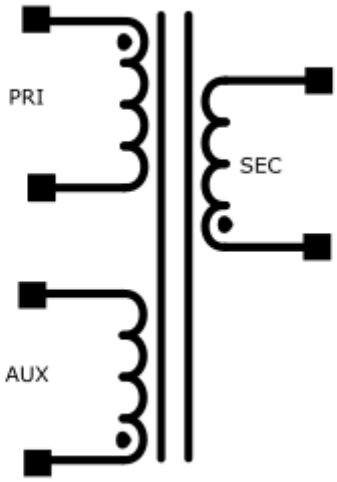
Transformer Electrical Diagram

Primary

Turns	42.0
AWG	24.0
Layers	3.0
Strands	1.0
Insulation Type	Heavy Insulated Magnet Wire

Auxiliary

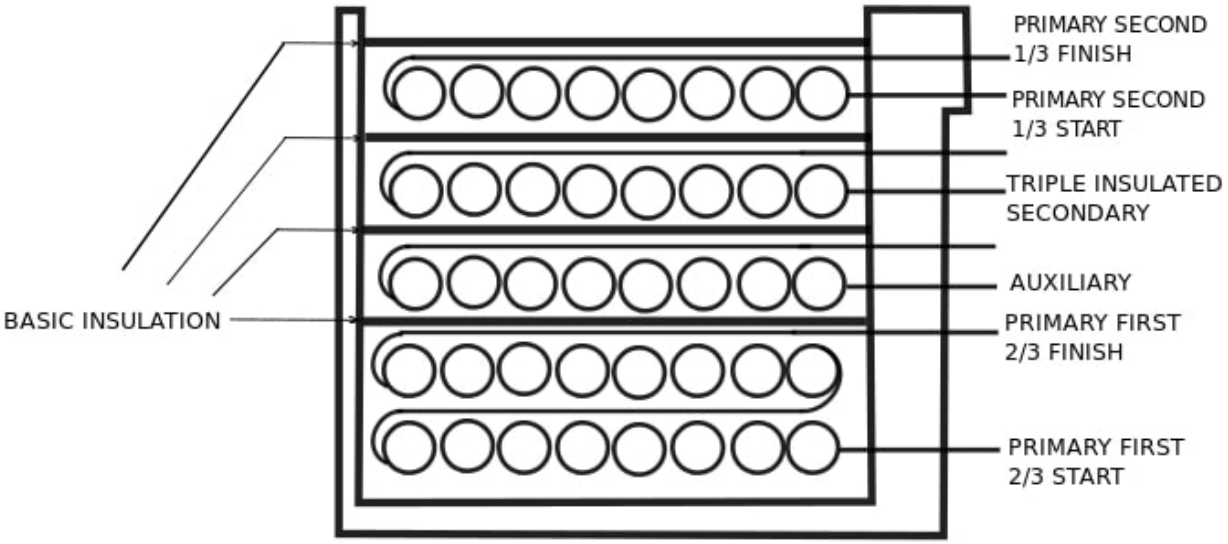
Turns	22.0
AWG	28.0
Layers	1.0
Strands	1.0
Insulation Type	Heavy Insulated Magnet Wire



Secondary

Turns	10.0
AWG	24.0
Layers	1.0
Strands	1.0
Insulation Type	Triple Insulated

Transformer Construction Diagram



Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 2/3.0	24.0	28	Clockwise
Auxiliary	28.0	22.0	Counter Clockwise
Triple Insulated Secondary	24.0	10.0	Counter Clockwise
Primary Second 1/3.0	24.0	14	Clockwise

Transformer Parameters

#	Name	Value
1.	Lpri	0.00128H
2.	Inductance Factor(Al)	727.0nH
3.	Npri	42.0
4.	Nsec	10.0
5.	Naux	22.0
6.	Core Type	RM8
7.	Core Material	TP4A
8.	Bmax	0.20T
9.	Switching Frequency	62.77kHz
10.	DMax	0.12
11.	Ipk(Primary)	0.39A
12.	Irms(Primary)	0.08A
13.	Ipk(Secondary)	1.62A
14.	Irms(Secondary)	0.95A

Design Assistance

1. Master key : 9D8168E432F942DB[v1]
2. **UC3845** Product Folder : http://www.ti.com/product/UC3845 : contains the data sheet and other resources.