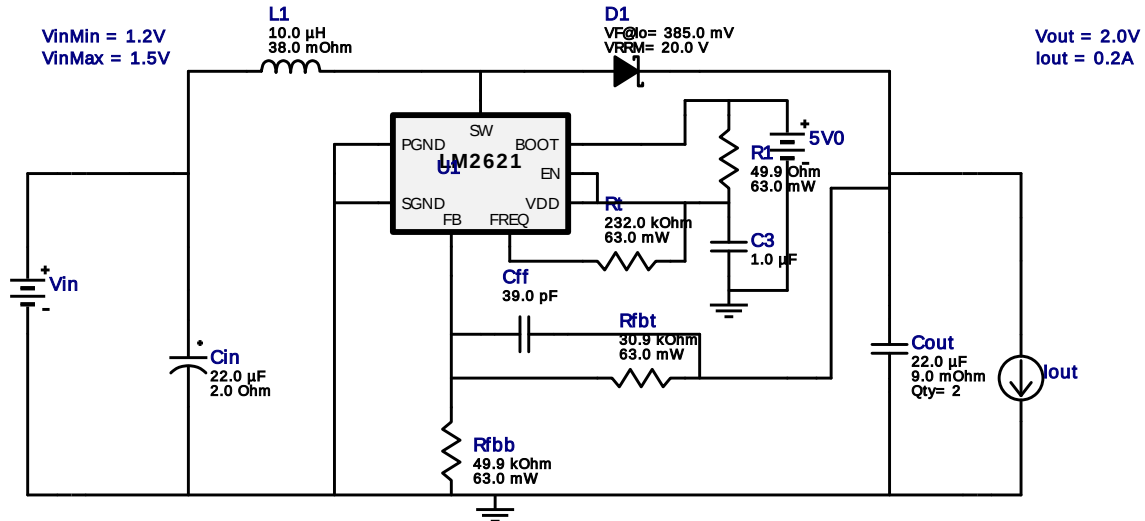
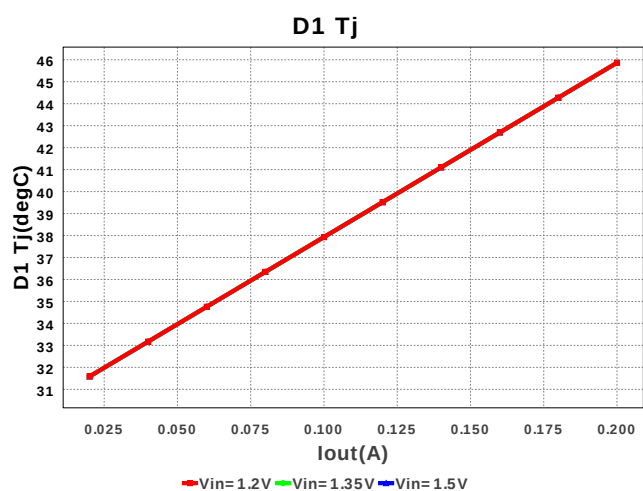
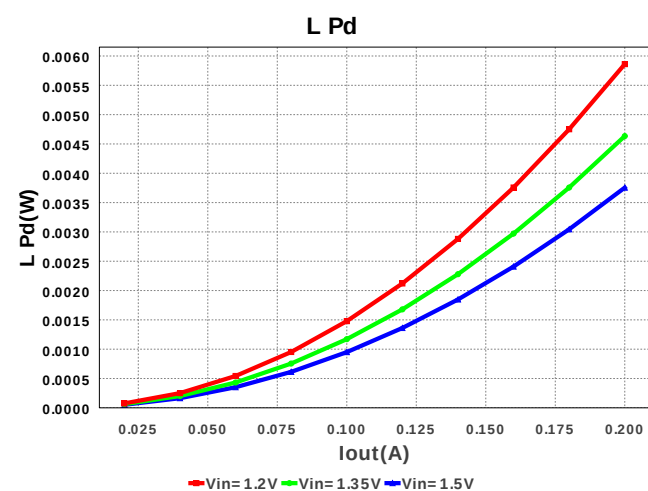
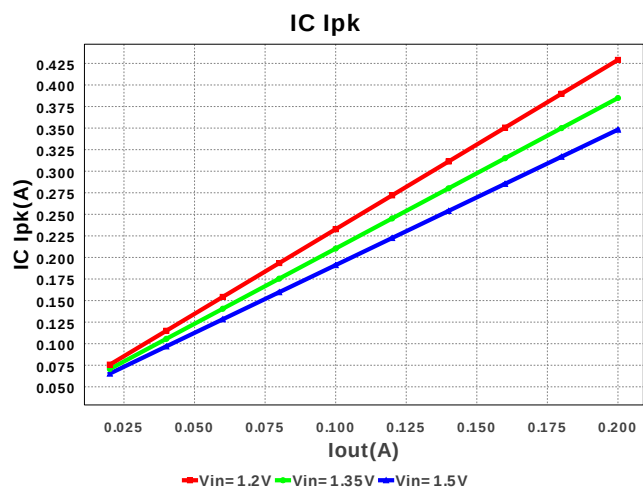
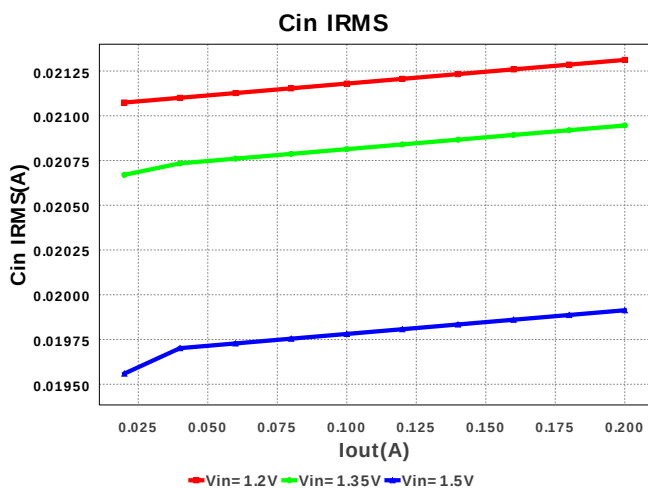
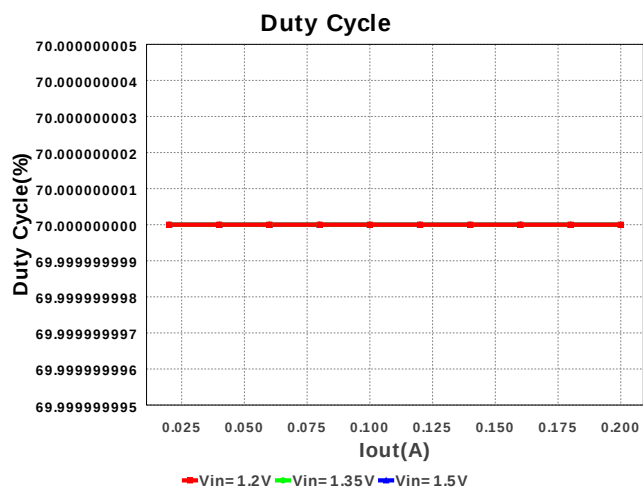
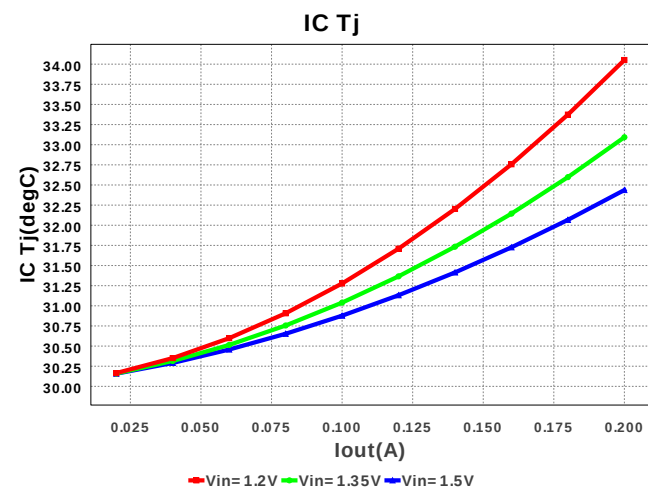


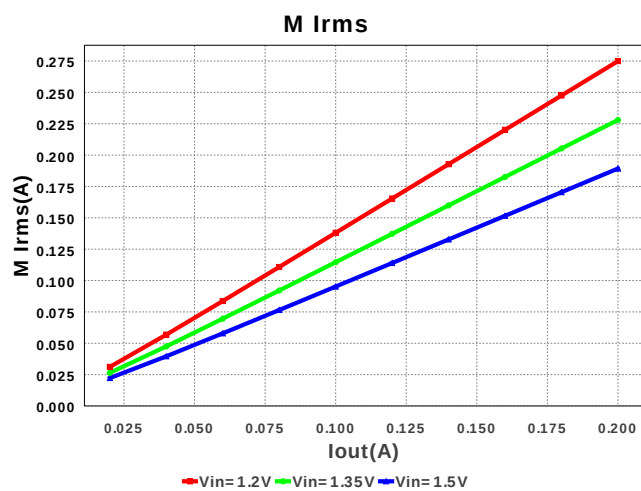
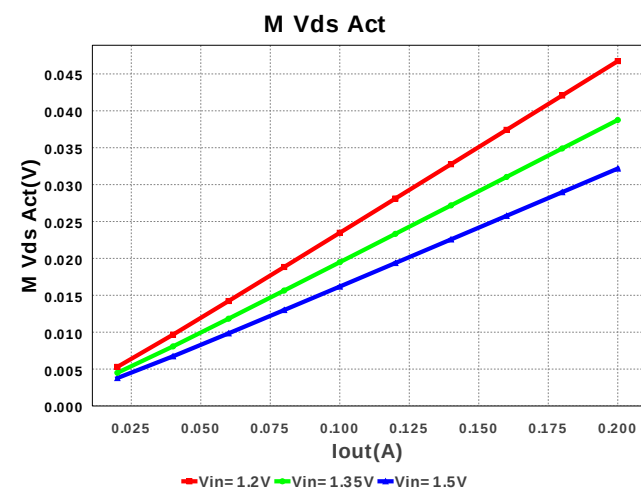
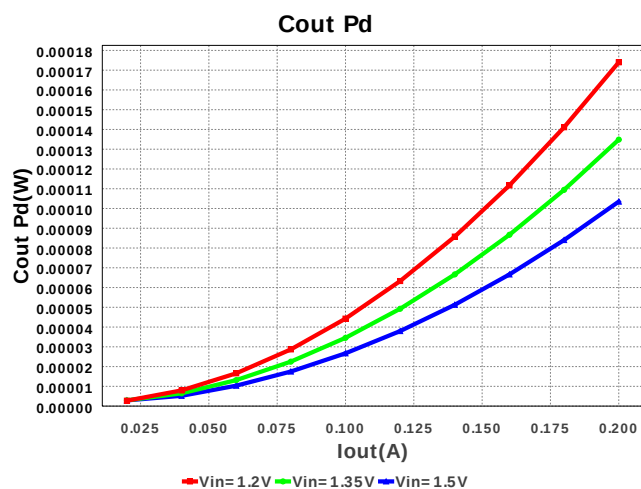
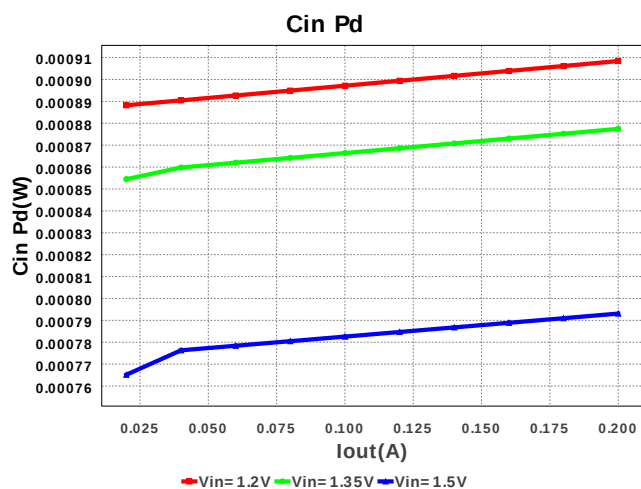
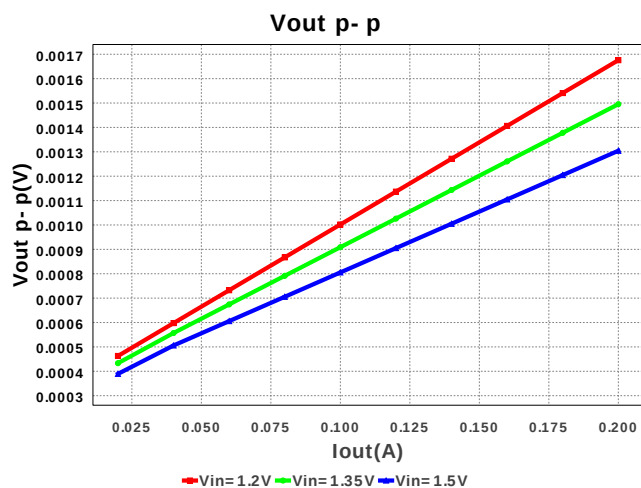
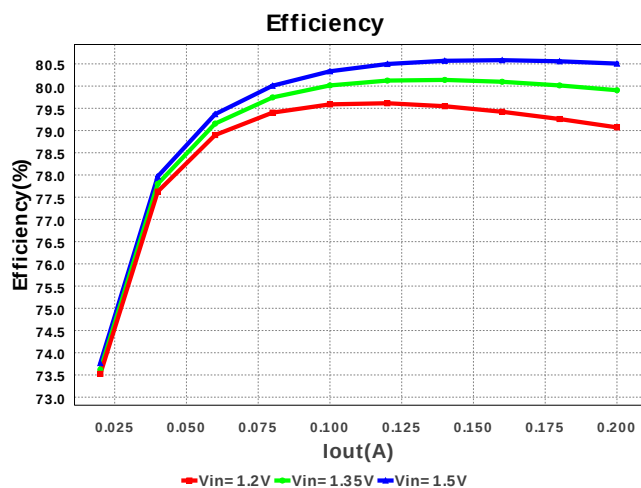


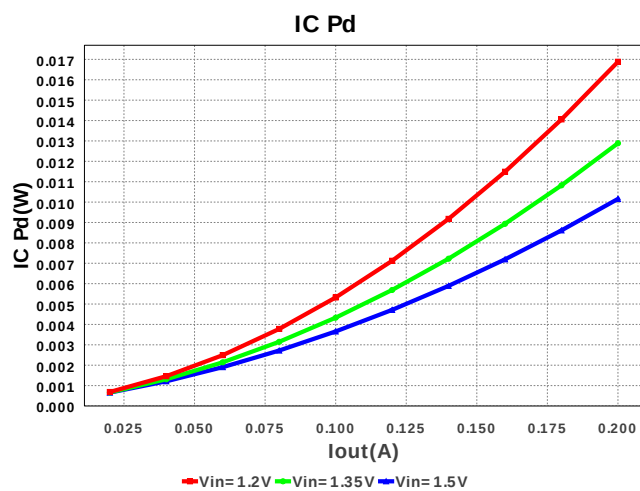
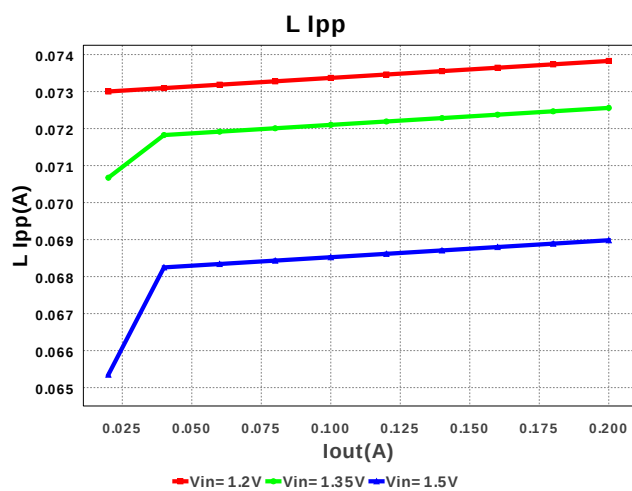
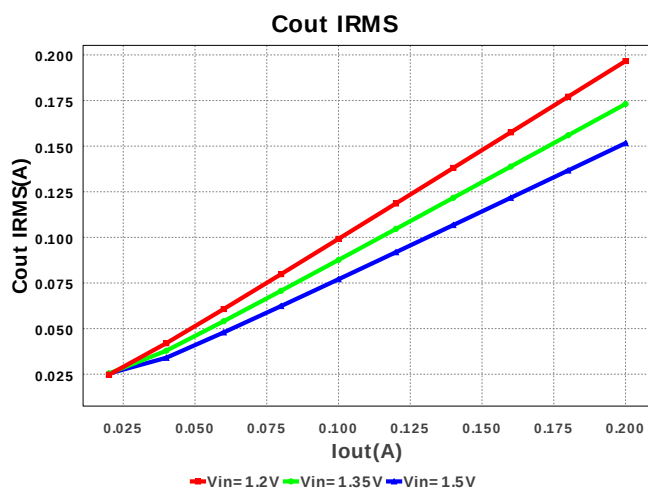
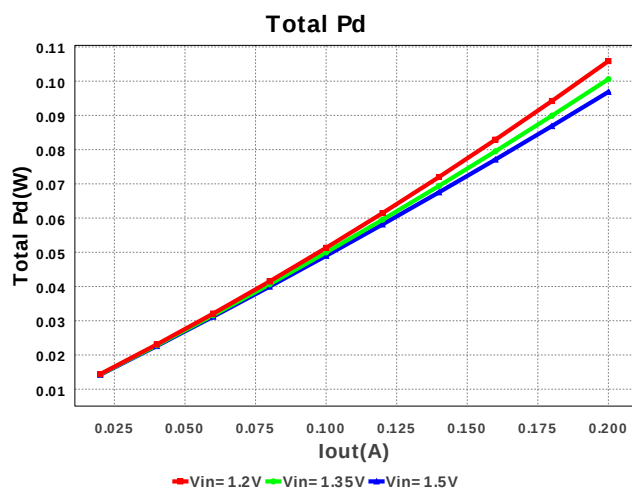
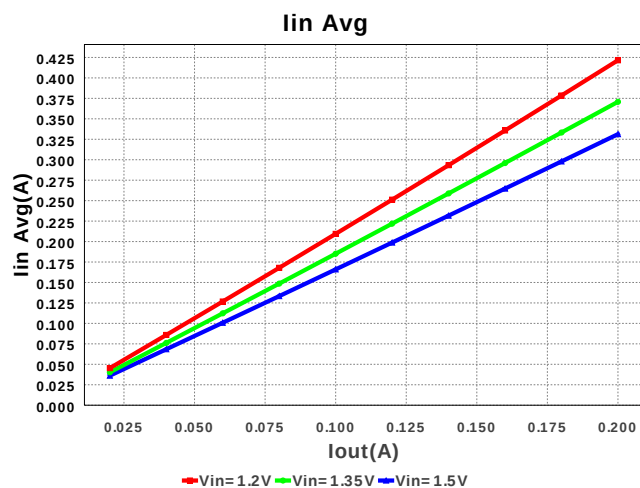
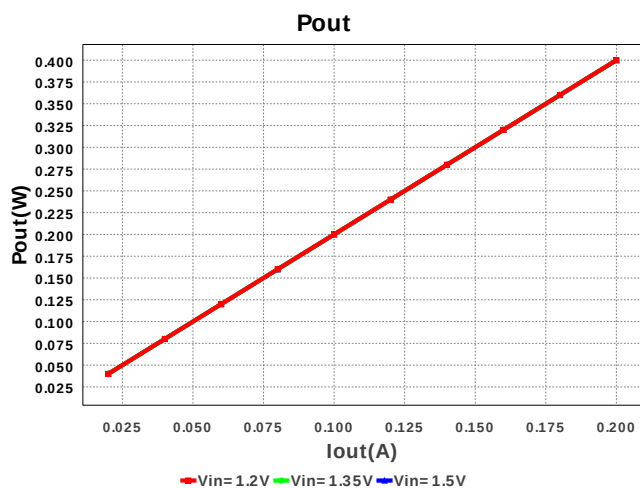
电气材料清单

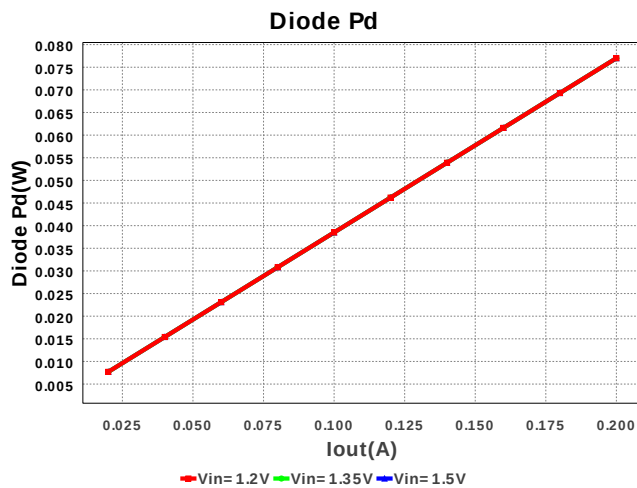
#	名称	制造商	零件编号	属性	Qty	Price	大小
1.	C3	MuRata	GRM155R61A105KE15D Series= X5R	Cap= 1.0 µF VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	 0402 8mm2
2.	Cff	Yageo America	CC0805JRNP09BN390 Series= C0G/NP0	Cap= 39.0 pF VDC= 50.0 V IRMS= 0.0 A	1	\$0.01	 0805 13mm2
3.	Cin	Vishay-Sprague	293D226X96R3B2TE3 Series= 293D	Cap= 22.0 µF ESR= 2.0 Ohm VDC= 6.3 V IRMS= 210.0 mA	1	\$0.18	 3528-21 26mm2
4.	Cout	MuRata	GRM21BR60J226ME39L Series= X5R	Cap= 22.0 µF ESR= 9.0 mOhm VDC= 6.3 V IRMS= 3.5 A	2	\$0.05	 0805 13mm2
5.	D1	ON Semiconductor	MBR0520LT1G	VF@Io= 385.0 mV VRRM= 20.0 V	1	\$0.06	 SOD-123 22mm2
6.	L1	Bourns	SRR6038-100Y	L= 10.0 µH DCR= 38.0 mOhm	1	\$0.25	 SRR6038 77mm2
7.	R1	Vishay-Dale	CRCW040249R9FKED Series= CRCW..e3	Res= 49.9 Ohm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
8.	Rfbb	Vishay-Dale	CRCW040249K9FKED Series= CRCW..e3	Res= 49.9 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
9.	Rfbb	Vishay-Dale	CRCW040230K9FKED Series= CRCW..e3	Res= 30.9 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
10.	Rt	Vishay-Dale	CRCW0402232KFKED Series= CRCW..e3	Res= 232.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2

#	名称	制造商	零件编号	属性	Qty	Price	大小
11.	U1	Texas Instruments	LM2621MM/NOPB	Switcher	1	\$0.65	 MUA08A 34mm2









工作数值

#	名称	数值	类别	说明
1.	Cin IRMS	24.089 mA	Current	输入电容器均方根纹波电流
2.	Cout IRMS	196.793 mA	Current	输出电容器均方根纹波电流
3.	IC Ipk	433.881 mA	Current	电路内的峰值开关电流
4.	Iin Avg	421.41 mA	Current	平均输入电流
5.	L Ipp	83.448 mA	Current	峰值到峰值电感器纹波电流
6.	M1 Irms	275.027 mA	Current	Q Iavg
7.	BOM 数量	12	General	Total Design BOM count
8.	大小	236.0 mm ²	General	BOM组件的总所占面积
9.	频率	733.333 kHz	General	开关频率
10.	IC Tolerance	37.2 mV	General	IC Feedback Tolerance
11.	M Vds Act	46.755 mV	General	Voltage drop across the MosFET
12.	模式	CCM	General	传导模式
13.	Pout	400.0 mW	General	总输出功率
14.	总 BOM	\$1.3	General	Total BOM Cost
15.	D1 Tj	45.862 degC	Op_Point	D1接点温度
16.	Vout OP	2.0 V	Op_Point	Operational Output Voltage
17.	占空比	70.0 %	Op_point	占空比
18.	效率	79.1 %	Op_point	稳态效率
19.	IC Tj	33.946 degC	Op_point	电路接点温度
20.	ICThetaJA	240.0 degC/W	Op_point	电路接点到环境热敏电阻
21.	IOUT_OP	200.0 mA	Op_point	Iout 操作点
22.	VIN_OP	1.2 V	Op_point	Vin操作点
23.	Vout p-p	1.894 mV	Op_point	峰值到峰值输出纹波电压
24.	Cin Pd	1.161 mW	Power	输入电容器功率耗散
25.	Cout Pd	174.273 μ W	Power	输出电容器功率耗散
26.	二极管 Pd	77.0 mW	Power	二极管功率耗散
27.	IC Pd	16.442 mW	Power	电路功率耗散
28.	L Pd	5.866 mW	Power	电感器功率耗散
29.	整体 Pd	105.69 mW	Power	总功率耗散

设计输入

#	名称	数值	说明
1.	输出电流	200.0 mA	最大输出电流
2.	Iout1	200.0 mAmps	Output Current #1
3.	Vin 最大	1.5 V	最高输入电压
4.	Vin 最小	1.2 V	最低输入电压
5.	输出电压:	2.0 V	输出电压
6.	Vout1	2.0 Volt	Output Voltage #1
7.	base_pn	LM2621	美国国家半导体的产品编号
8.	源	DC	输入源类别
9.	工作环境温度	30.0 degC	环境温度

设计协助

1. LM2621 Product Folder : <http://www.ti.com/product/lm2621> : contains the data sheet and other resources.

Texas Instruments' WEBENCH simulation tools attempt to recreate the performance of a substantially equivalent physical implementation of the design. Simulations are created using Texas Instruments' published specifications as well as the published specifications of other device manufacturers. While Texas Instruments does update this information periodically, this information may not be current at the time the simulation is built. Texas Instruments does not warrant the accuracy or completeness of the specifications or any information contained therein. Texas Instruments does not warrant that any designs or recommended parts will meet the specifications you entered, will be suitable for your application or fit for any particular purpose, or will operate as shown in the simulation in a physical implementation. Texas Instruments does not warrant that the designs are production worthy.

You should completely validate and test your design implementation to confirm the system functionality for your application prior to production.

Use of Texas Instruments' WEBENCH simulation tools is subject to [Texas Instruments' Site Terms and Conditions of Use](#). Prototype boards based on WEBENCH created designs are provided AS IS without warranty of any kind for evaluation and testing purposes and are subject to the terms of the [Evaluation License Agreement](#).