
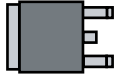











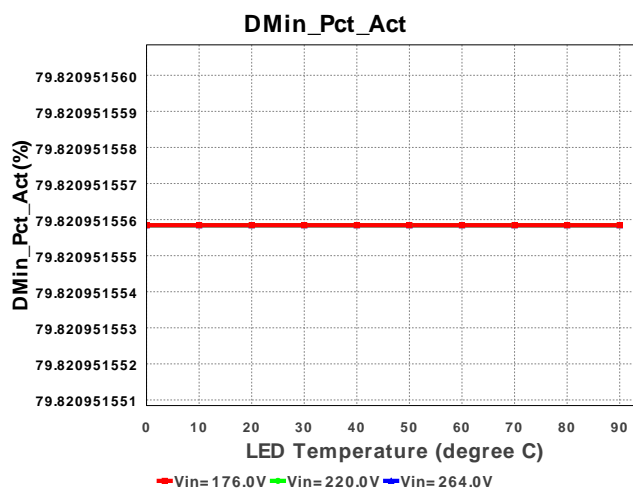
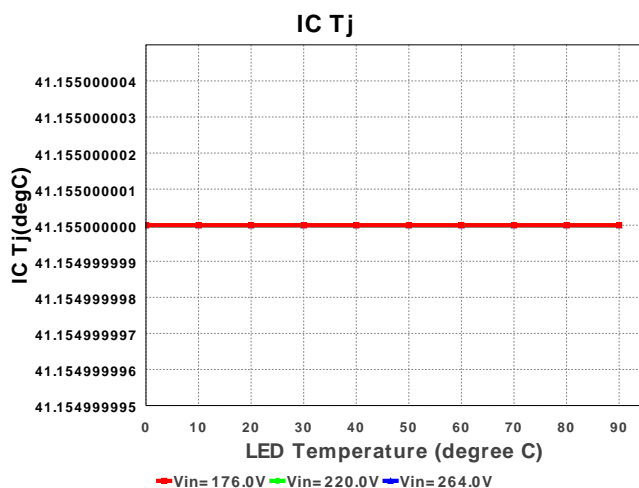
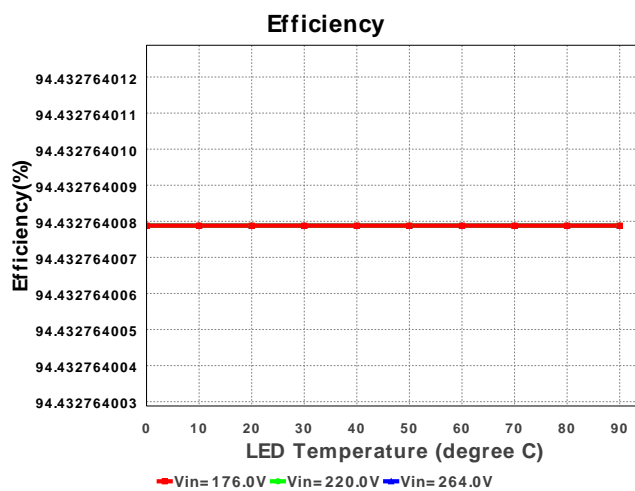
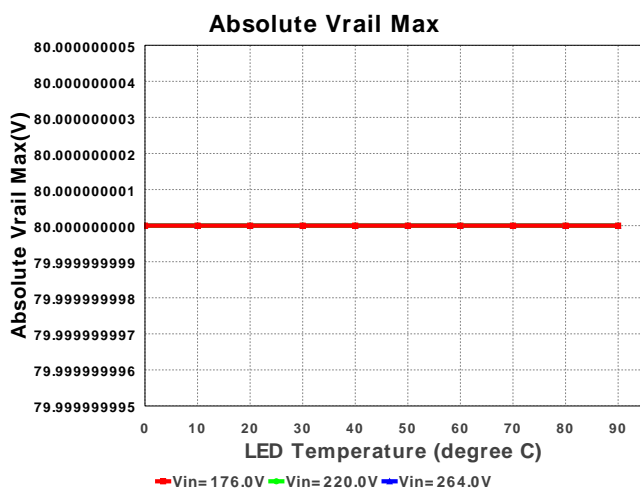
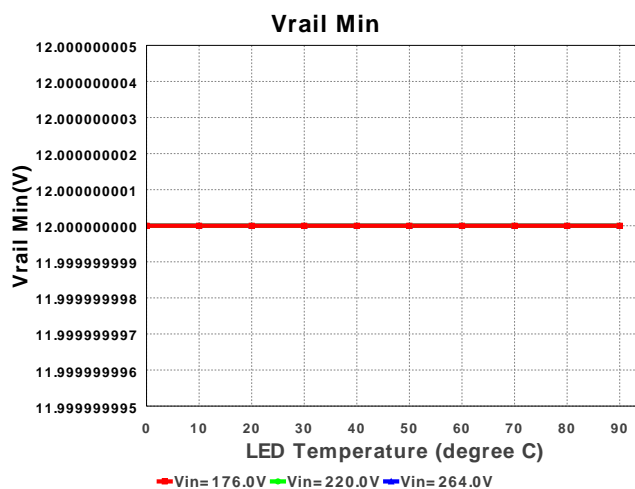
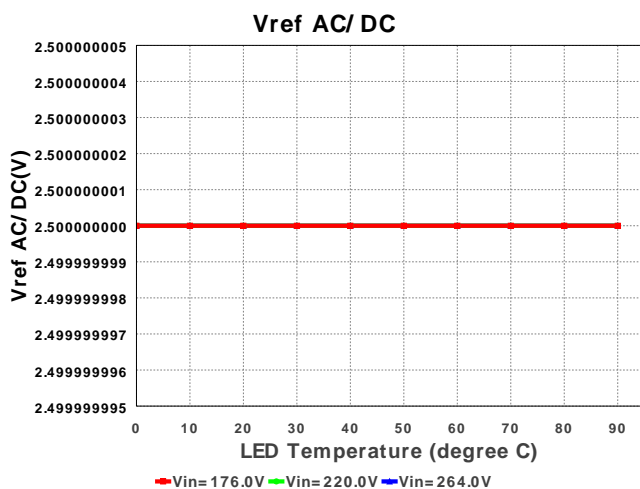
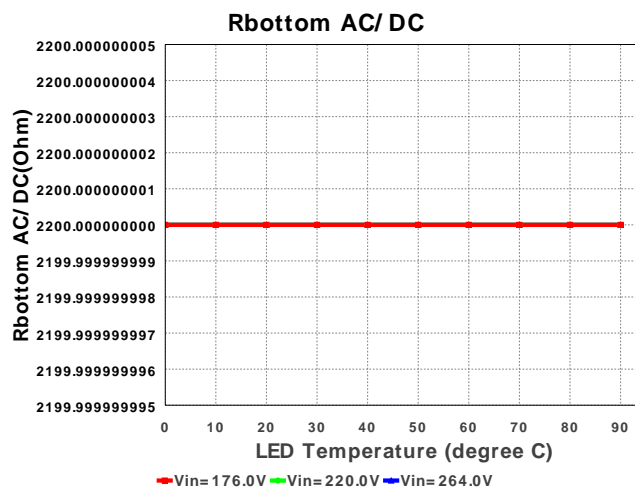
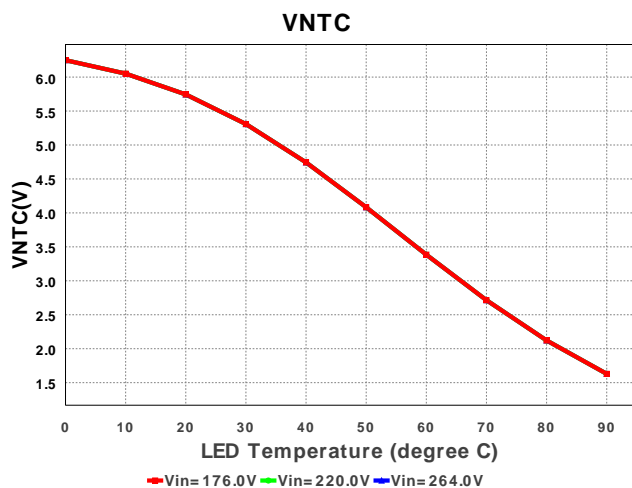


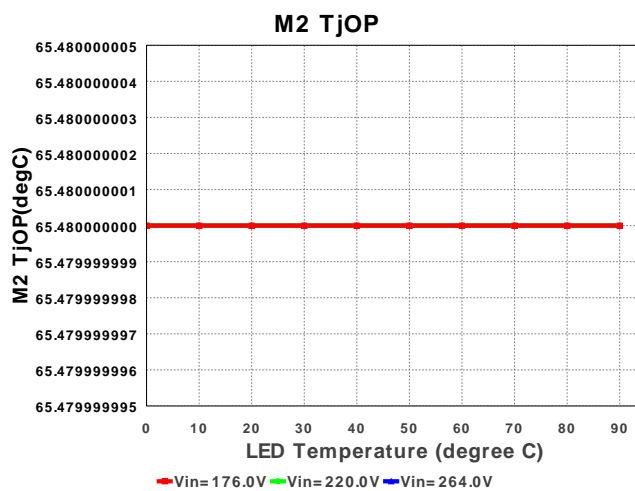
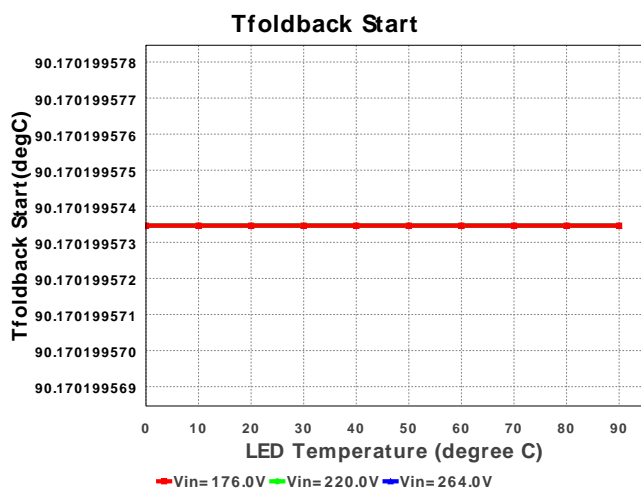
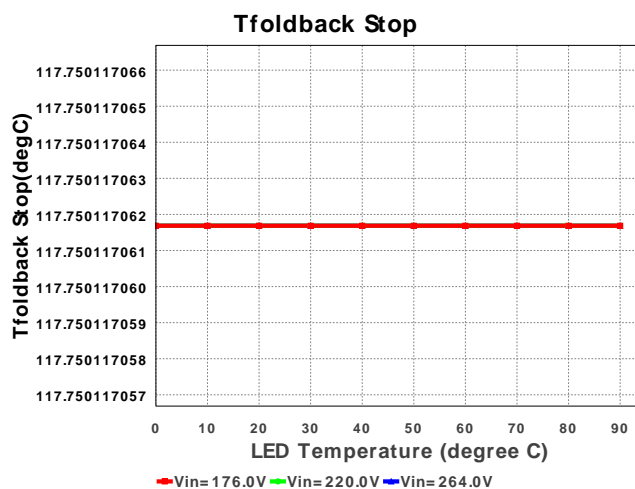
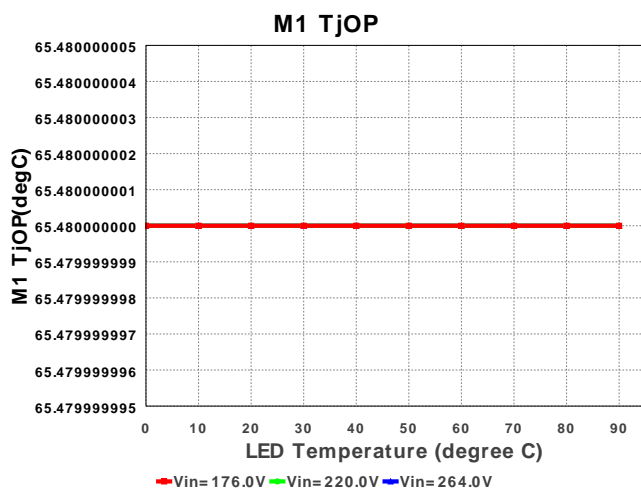
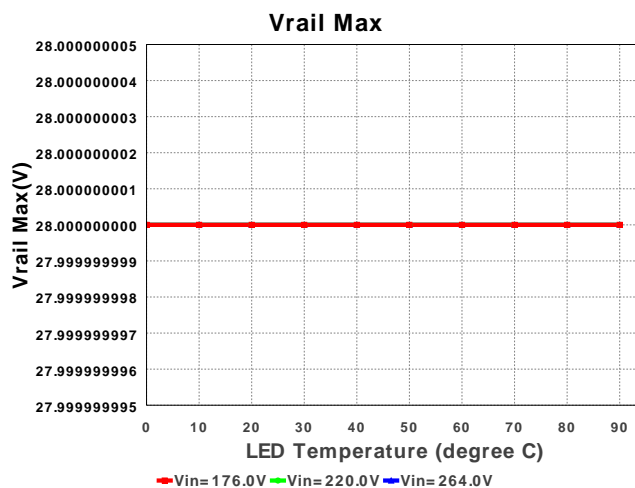
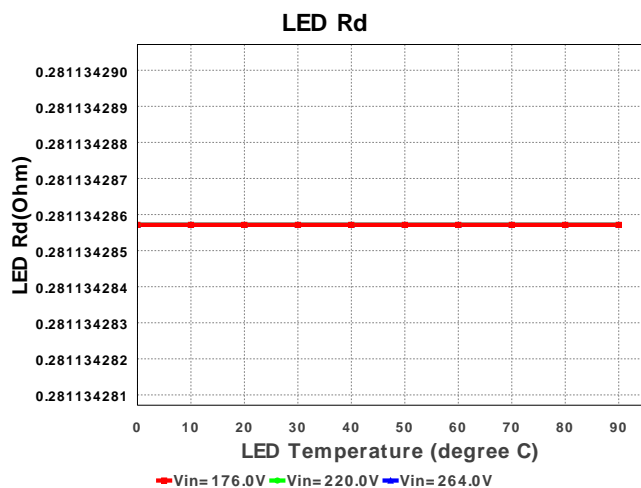
电气材料清单

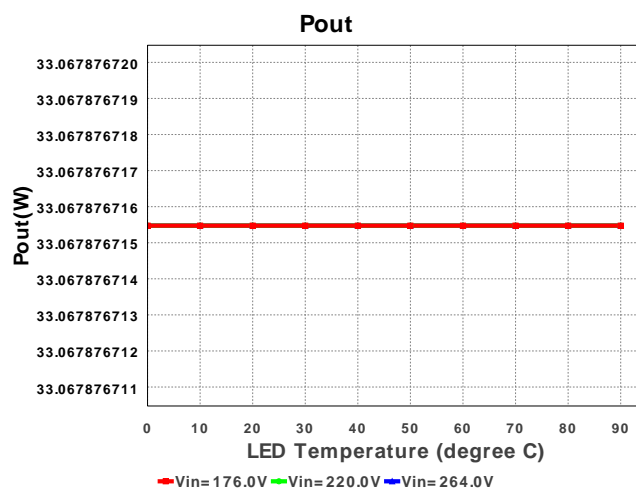
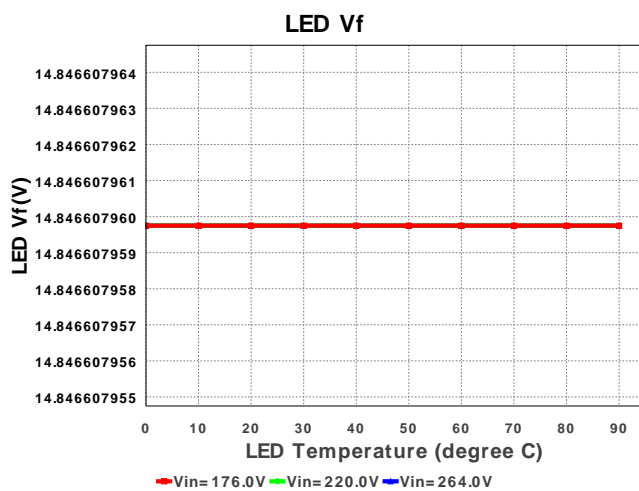
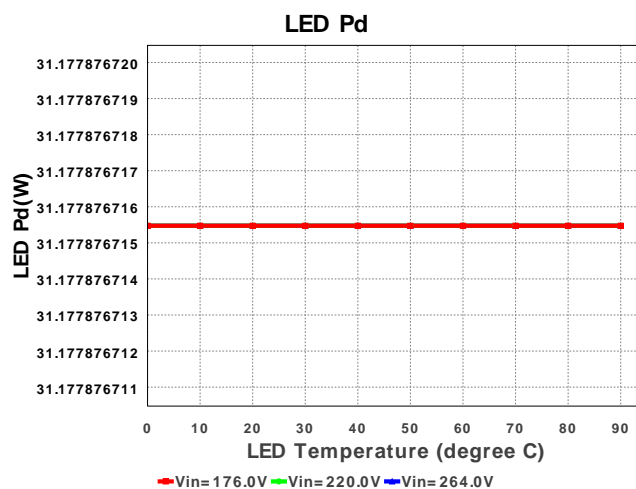
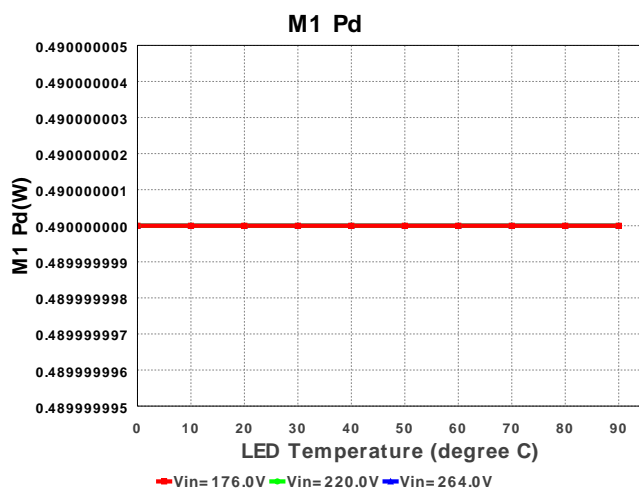
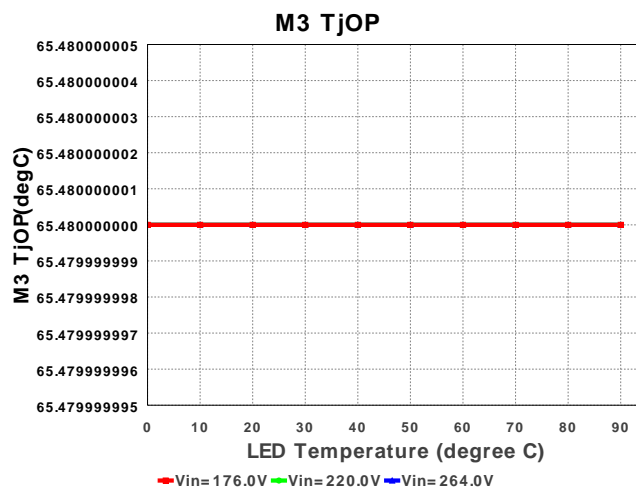
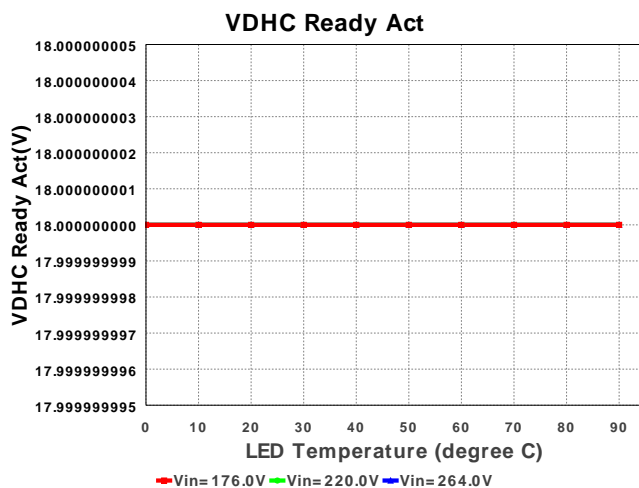
#	名称	制造商	零件编号	属性	Qty	Price	大小
1.	Cdhc	MuRata	GRM155R61A224KE19D Series= X5R	Cap= 220.0 nF VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0402 8mm2
2.	Cflt	Yageo America	CC0805KRX7R9BB222 Series= X7R	Cap= 2.2 nF VDC= 50.0 V IRMS= 0.0 A	1	\$0.01	0805 13mm2
3.	Cthm	MuRata	GRM155C80J474KE19D Series= 379	Cap= 470.0 nF VDC= 6.3 V IRMS= 0.0 A	1	\$0.01	0402 8mm2
4.	Cvcc	MuRata	GRM155R61A105KE15D Series= X5R	Cap= 1.0 µF VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0402 8mm2
5.	D_LED1	Cree	XMLAWT-00-0000-000LT40E4ED		5	\$3.08	 xlampxml 51mm2
6.	D_LED2	Cree	XMLAWT-00-0000-000LT40E4ED		5	\$3.08	 xlampxml 51mm2
7.	D_LED3	Cree	XMLAWT-00-0000-000LT40E4ED		5	\$3.08	 xlampxml 51mm2

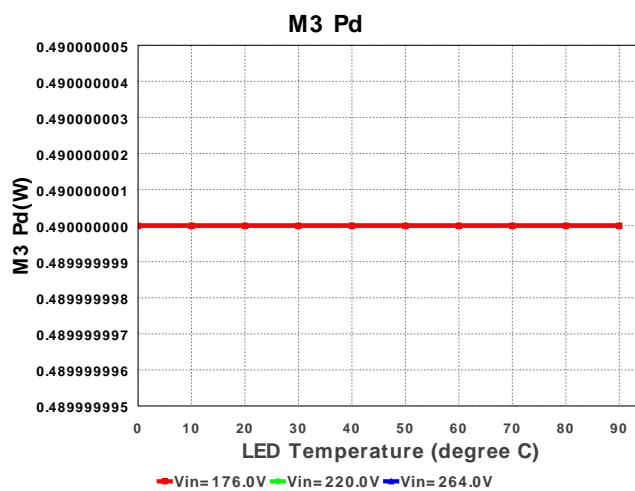
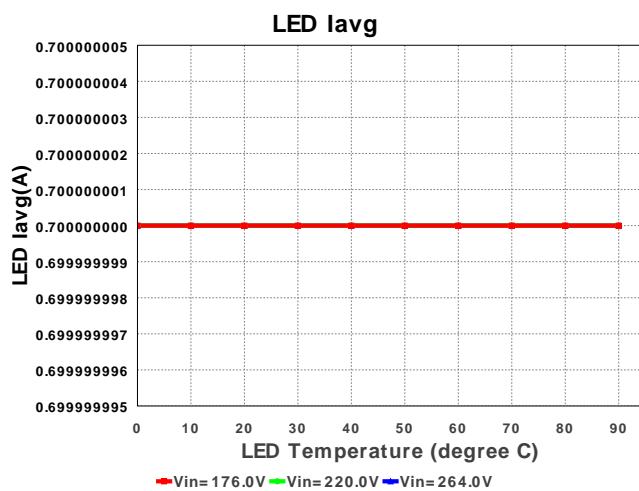
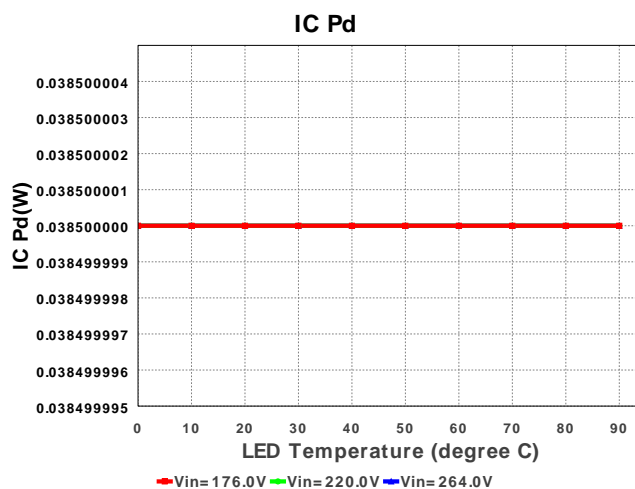
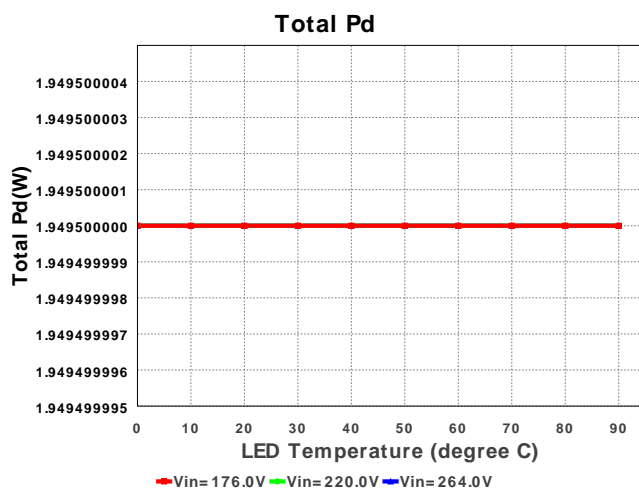
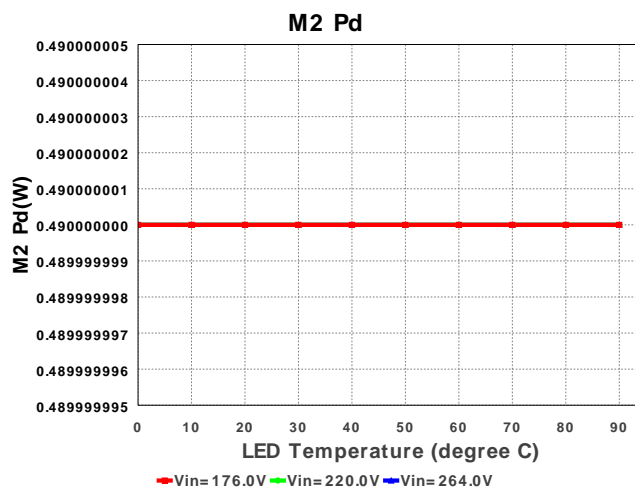
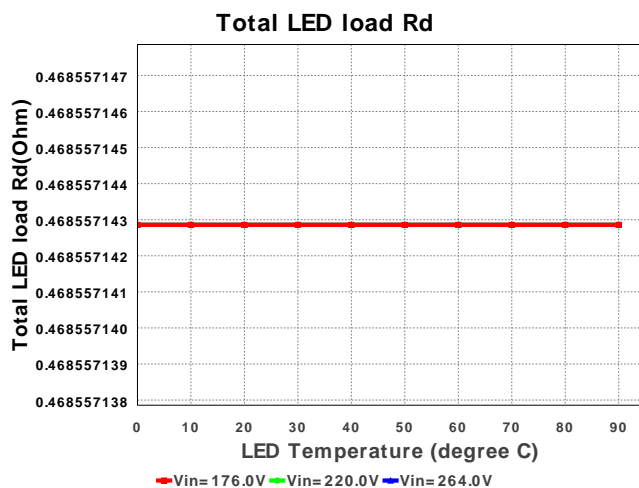
#	名称	制造商	零件编号	属性	Qty	Price	大小
8.	M1	Fairchild Semiconductor	FDD2572	VdsMax= 150.0 V IdsMax= 4.0 Amps	1	\$0.66	 DPAK 102mm2
9.	M2	Fairchild Semiconductor	FDD2572	VdsMax= 150.0 V IdsMax= 4.0 Amps	1	\$0.66	 DPAK 102mm2
10.	M3	Fairchild Semiconductor	FDD2572	VdsMax= 150.0 V IdsMax= 4.0 Amps	1	\$0.66	 DPAK 102mm2
11.	Rdhc	Vishay-Dale	CRCW04025K36FKED Series= CRCW..e3	Res= 5.36 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
12.	Rdmin1	Vishay-Dale	CRCW040214K3FKED Series= CRCW..e3	Res= 14.3 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
13.	Rdmin2	Vishay-Dale	CRCW040210K0FKED Series= CRCW..e3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
14.	Rfb1	Vishay-Dale	CRCW040261K9FKED Series= CRCW..e3	Res= 61.9 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
15.	Rfb2	Vishay-Dale	CRCW040210K0FKED Series= CRCW..e3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
16.	Rsns1	Rohm	MCR25JZHFLR300 Series= 298	Res= 300.0 mOhm Power= 500.0 mW Tolerance= 1.0%	1	\$0.04	 1210 23mm2
17.	Rsns2	Rohm	MCR25JZHFLR300 Series= 298	Res= 300.0 mOhm Power= 500.0 mW Tolerance= 1.0%	1	\$0.04	 1210 23mm2
18.	Rsns3	Rohm	MCR25JZHFLR300 Series= 298	Res= 300.0 mOhm Power= 500.0 mW Tolerance= 1.0%	1	\$0.04	 1210 23mm2
19.	Rthm1	Vishay-Dale	CRCW040211K5FKED Series= CRCW..e3	Res= 11.5 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
20.	Rthm2	Vishay-Dale	CRCW04025K76FKED Series= CRCW..e3	Res= 5.76 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
21.	U1	Texas Instruments	LM3464MH/NOPB	Switcher	1	\$3.42	NA 0mm2

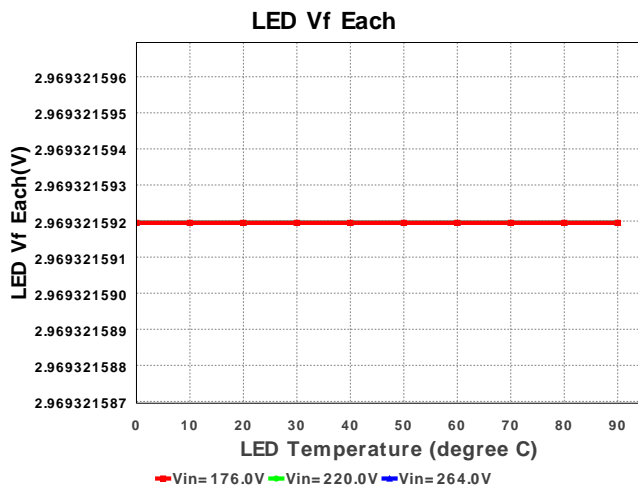












工作数值

#	名称	数值	类别	说明
1.	LED Iavg	700.0 mA	Current	LED 平均电流
2.	BOM 数量	34	General	Total Design BOM count
3.	大小	1.258 kmm ²	General	BOM组件的总所占面积
4.	频率	0.0 Hz	General	开关频率
5.	Pout	33.075 W	General	总输出功率
6.	总 BOM	\$51.91	General	Total BOM Cost
7.	M3 TjOp	65.48 degC	Op_Point	MOSFET 接点温度
8.	Tfoldback Stop	117.75 degC	Op_Point	Stop Temperature for Thermal Foldback
9.	效率	94.434 %	Op_point	稳态效率
10.	IC Tj	40.0 degC	Op_point	电路接点温度
11.	IOUT_OP	2.1 A	Op_point	Iout 操作点
12.	LED Rd	281.134 mOhm	Op_point	LED 动态电阻
13.	LED Vf	14.85 V	Op_point	总 LED 正激计算电压
14.	M1 TjOP	65.48 degC	Op_point	MOSFET 接点温度
15.	M2 TjOP	65.48 degC	Op_point	MOSFET 接点温度
16.	VIN_OP	264.0 V	Op_point	Maximum AC voltage input to power supply
17.	IC Pd	38.5 mW	Power	电路功率耗散
18.	LED Pd	31.178 W	Power	LED 功率耗散
19.	M1 Pd	490.0 mW	Power	在交流线路期间于开关FET内的平均功率耗散
20.	M2 Pd	490.0 mW	Power	在交流线路期间于开关FET内的平均功率耗散
21.	M3 Pd	490.0 mW	Power	在交流线路期间于开关FET内的平均功率耗散
22.	整体 Pd	1.95 W	Power	总功率耗散
23.	Absolute Vrail Max	80.0 V	Unknown	Absolute Vrail Maximum
24.	DMin_Pct_Act	79.821 %	Unknown	Minimum Duty Cycle Limit when LEDs are Hot
25.	Single LED Vf	2.97 V	Unknown	Calculated Forward Voltage of Each LED
26.	Rbottom AC/DC	2.2 kOhm	Unknown	Bottom Resistor in Feedback Loop of Power Supply Unit
27.	Tfoldback Start	90.17 degC	Unknown	Start Temperature for Thermal Foldback
28.	整体 LED 负载 Rd	468.557 mOhm	Unknown	总 LED 负载动态电阻
29.	VDHC Ready Act	18.0 V	Unknown	Ready Voltage for DHC Startup
30.	VNTC	6.249 V	Unknown	Voltage across NTC resistor
31.	Vrail Max	28.0 V	Unknown	Maximum Rail voltage that can be pushed up by the LM3464
32.	Vrail Min	10.0 V	Unknown	Minimum Rail voltage of Power Supply Unit
33.	Vref AC/DC	2.5 V	Unknown	Reference Voltage for Circuit in Power Supply Unit

设计输入

#	名称	数值	说明
1.	输出电流	2.1 A	最大输出电流
2.	Iout1	2.1 Amps	Output Current #1
3.	Vin 最大	264.0 V	最高输入电压
4.	Vin 最小	176.0 V	最低输入电压
5.	输出电压:	14.5 V	输出电压
6.	Vout1	14.5 Volt	Output Voltage #1
7.	应用	LED_DRIVER	LED 应用
8.	base_pn	LM3464	美国国家半导体的产品编号
9.	LED_Architect	N	LED Architect Project
10.	ledparallel	3.0	并联的LED数量
11.	LED 零件编号	XMLAWT-00-0000-000L	LED零件编号
12.	ledseries	5.0	串联的LED数量
13.	line_fsw	50.0	交流线路频率
14.	源	AC	输入源类别
15.	工作环境温度	40.0 degC	环境温度

设计协助

1. Thermal foldback is necessary in many applications due to the extreme temperatures created in LED environments. In general, two functions are necessary a temperature break-point after which the nominal operating current needs to be reduced, and a slope corresponding to the amount of LED current decrease per temperature increase.

2. The user can set the 'Start' and 'Stop' temperatures for the thermal foldback by changing the default settings on the 'Thermal Foldback start and end temperatures' in the 'Advanced Options' menu on the left side bar. These values are then updated on the 'Op-Vals' section. The 'Op-Vals' section has a slider to simulate the increase or decrease in temperature. The operating value 'Thermal Resistance' changes based on the change in temperature. This is the resistance of the thermistor at the selected temperature and it's value is then updated in the simulation directly

3. LM3464 Product Folder : <http://www.ti.com/product/lm3464> : 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.

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