用途: 用于恒定频率、电流脉冲宽度调制模式的降压转换器。

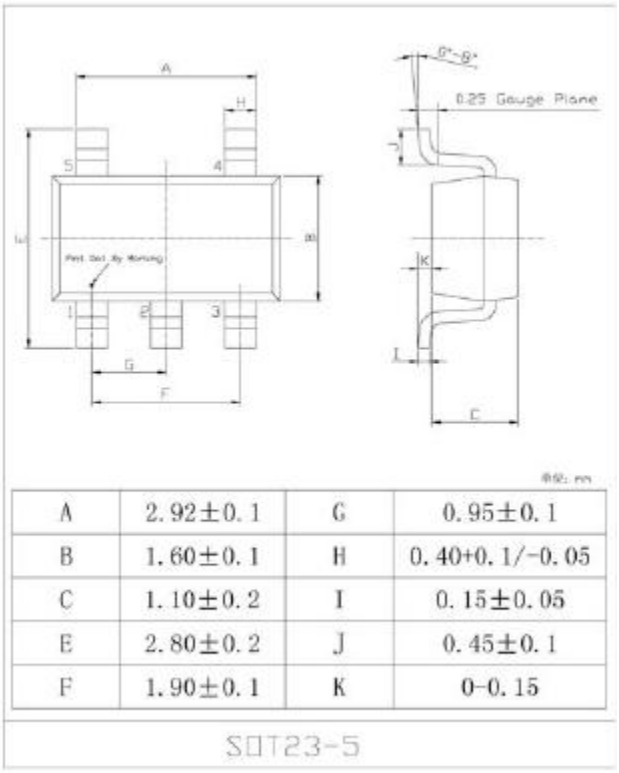
Purpose：For onstant frequency, current mode PWM step-down converter.

特点: 1.高效率高达96% 2.1.5MHz恒频工作 3. 输出电流1.0A

Features: 1. High Efficiency: Up to 96% 2.1.5MHz Constant Frequency Operation
3. 1.0A Output Current

极限参数/Absolute maximum ratings(Ta=25℃)

特性 Item	符号 Symbol	数值 Rating	单位 Unit
输入电源电压 Supply Input voltage	V_{IN}	-0.3 to +6	V
EN/VOUT 端电压 EN/VOUT Voltages	V_{EN}	0.6	V
LX 端电压 LX Voltage	V_{LX}	-0.3	V
LX 端和源极电流峰值 Peak LX Sink and	I_P	2.5	A
结温 Junction Temperature	T_J	125	℃
焊接温度（焊接 10 秒）Lead Temperature (Soldering,10s)	T_L	300	℃
工作温度 Operating Temperature	T_{opr}	-40 to +85	℃
储存温度 Storage Temperature	T_{stg}	-65 to +150	℃

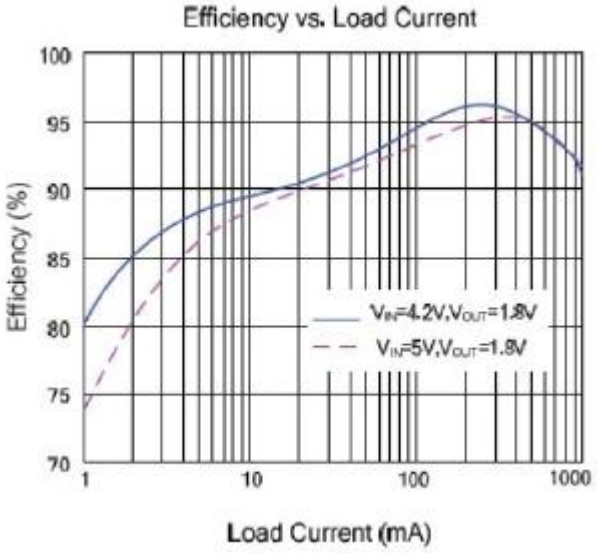


A	2.92±0.1	G	0.95±0.1
B	1.60±0.1	H	0.40+0.1/-0.05
C	1.10±0.2	I	0.15±0.05
E	2.80±0.2	J	0.45±0.1
F	1.90±0.1	K	0-0.15

SOT23-5

电性能参数/Electrical Characteristics(Ta=25℃)

参数符号 Symbol	测试条件 Test condition	数值 Rating			单位 Unit
		最小值 Min	典型值 Typ	最大值 Max	
输入电压范围 Input Voltage Range		2.5		6.0	V
UVLO(欠压锁定)阈值 UVLO Threshold		2.4	2.5	2.6	V
输入直流电源电流 Input DC Supply Current 脉冲宽度调制模式 PWM Mode 脉冲频率调制模式 PFM Mode 关机模式 Shutdown Mode	Vout = 90%, Iload=0mA Vout = 105%, Iload=0mA V_{RUN} = 0V, V_{IN}=4.2V		140 20 0.1	300 35 1.0	μA μA μA μA
反馈电压 Vfb 调整值 Regulated Feedback Voltage	T_A = 25℃	0.588	0.600	0.612	V
	T_A = 0°C ≤ T_A ≤ 85°C	0.586	0.600	0.613	V
	T_A = -40°C ≤ T_A ≤ 85°C	0.585	0.600	0.615	V
参考电压调整率 Reference Voltage Line Regulation	Vin=2.5V to 6.0V		0.04	0.40	%/V
输出电压调整率 Output Voltage Line Regulation	Vin=2.5V to 6.0V		0.04	0.4	%
负载电压调整率 Output Voltage Load Regulation			0.5		%
振荡频率 Oscillation Frequency	Vout=100%		1.5		MHz
	Vout=0V		300		KHz
PMOS 导通电阻 On Resistance of PMOS	I_{LX}=100mA		0.25	0.35	Ω
NMOS 导通电阻 ON Resistance of NMOS	I_{LX}=-100mA		0.15	0.20	Ω
峰值电流限制 Peak Current Limit	V_{IN}= 3V, Vout=90%		2.5		A
运行阈值 RUN Threshold		0.30	1.0	1.50	V
运行漏电流 Iq RUN Leakage Current			±0.01	±1.0	μA
LX 漏电流 Isd LX Leakage Current	V_{RUN}=0V,V_{IN}=VLX=5V		±0.01	±1.0	μA


Efficiency vs. Load Current
Efficiency (%)
100
95
90
85
80
75
70
1
10
100
1000
Load Current (mA)
VIN=4.2V,VOUT=1.8V
VIN=5V,VOUT=1.8V