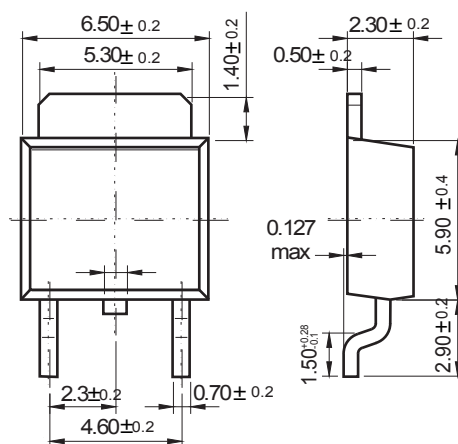


特征

输出电流最大 1.0A
 输出电压 5V
 热过载保护
 短路保护
 输出晶体管安全操作区 (SOA)保护

TO-252

Unit: mm



Dimensions in inches and (millimeters)

绝对最大额定参数

参数	符号	数值	单位
输入电压	V_{IN}	35	V
输出电压	V_O	5	V
连续总耗散功率	P_D	1.25	W
工作温度范围	T_{OPR}	0 ~ +125	°C
储存温度范围	T_{STG}	-55 ~ +150	°C

L78M05CDT

电特性

(参考测试电路, $I_O = 750\text{mA}$, $V_I = 10\text{V}$, $C_I = 0.33\mu\text{F}$, $C_O = 0.1\mu\text{F}$ 除非另有说明)

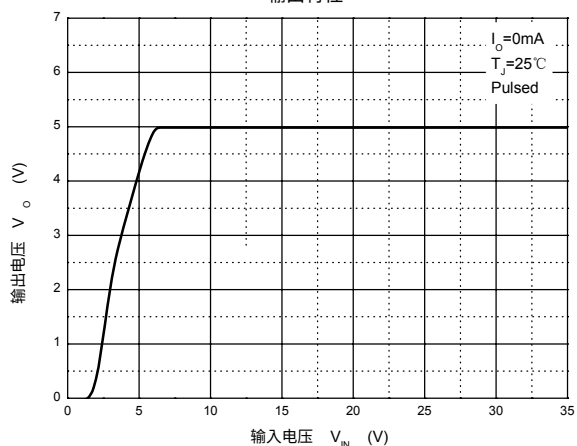
参数	符号	条件	数值			单位
			最小值	典型值	最大值	
		$T_j = 25^\circ\text{C}$	4.8		5.2	
输出电压	V_O	$V_I = 7 \sim 20\text{V}$ $I_O = 5 \sim 1\text{A}$	4.75	5	5.25	V
线性调整率	ΔV_O	$T_j = 25^\circ\text{C}$ $V_I = 7 \sim 25\text{V}$			120	mV
		$V_I = 8 \sim 22\text{V}$			60	
负载调整率	ΔV_O	$T_j = 25^\circ\text{C}$ $I_O = 5\text{mA} \sim 1\text{A}$			120	mV
		$I_O = 0.25\text{A} \sim 0.75\text{A}$			60	
静态电流	I_Q	$T_j = 25^\circ\text{C}$			8	mA
静态电流变化	ΔI_Q	$I_O = 5\text{mA} \sim 1\text{A}$			0.5	mA
		$V_I = 7 \sim 25\text{V}$			1.2	
输出噪声电压	V_N	$10\text{Hz} \leq f \leq 100\text{kHz}$		40		μV
纹波抑制	RR	$f = 120\text{Hz}$, $I_O = 300\text{mA}$ $V_I = 8 \text{ to } 18\text{V}$	60			dB
压差电压	V_D	$T_j = +25^\circ\text{C}$, $I_O = 1\text{A}$		2		V
短路电流	I_{SC}	$T_j = +25^\circ\text{C}$, $V_I = 35\text{V}$		300		mA
峰值电流	I_{PK}			1.50		A

备注:

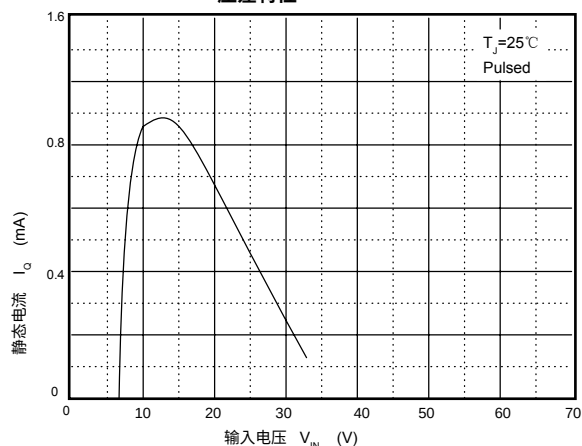
*在恒定的连续温度下, 规定了负荷和线路调节. 由于加热效应而引起的 V_O 的变化必须考虑. 采用低负荷的脉冲测试.

额定值和特性曲线(L78M05CDT)

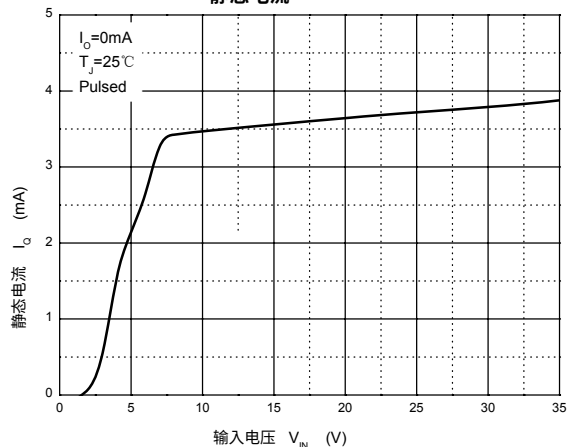
输出特性



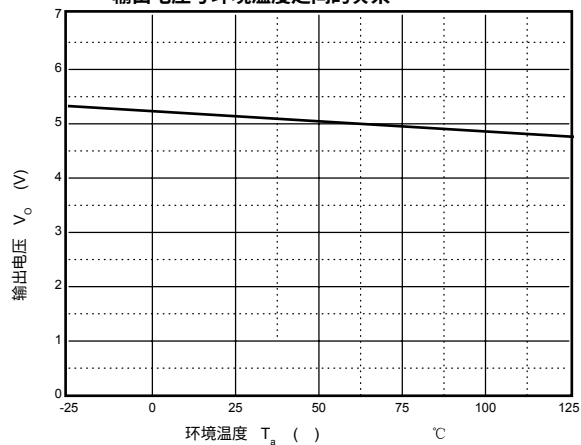
压差特性



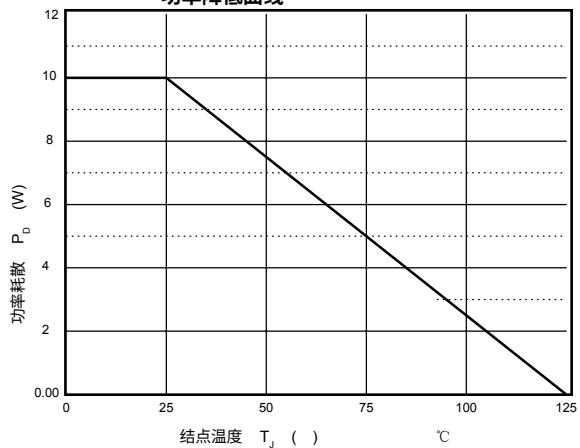
静态电流



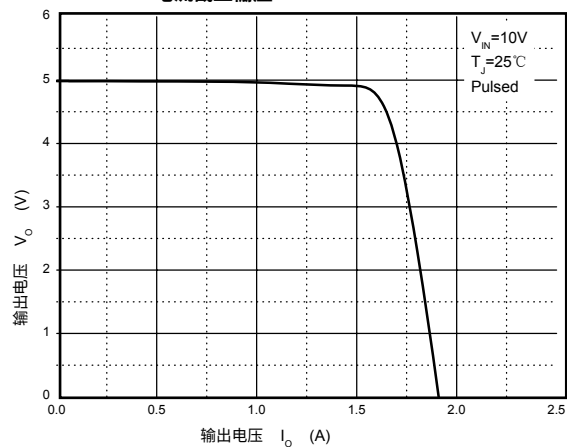
输出电压与环境温度之间的关系

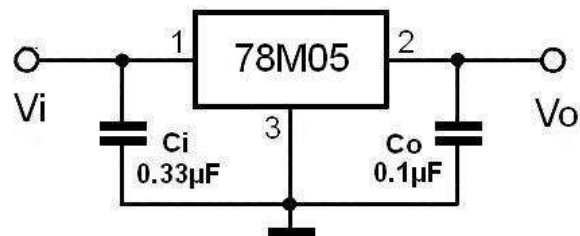


功率降低曲线

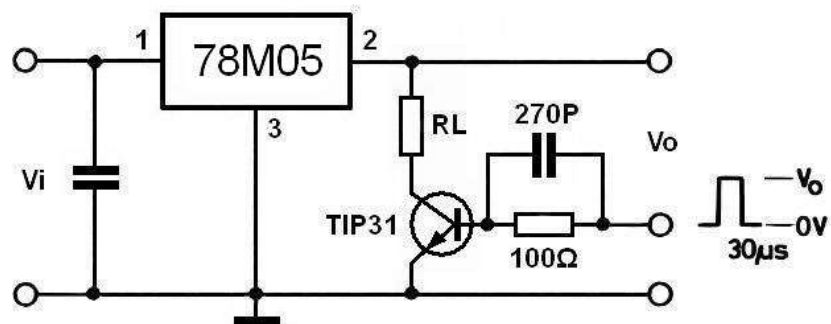


电流截止栅压

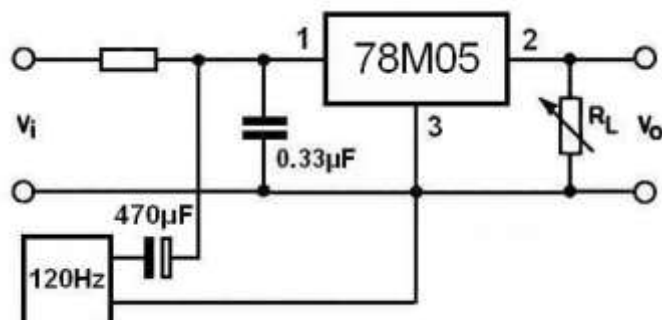




DC Parameter



Load Regulation



Ripple Rejection