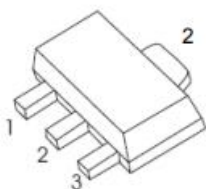
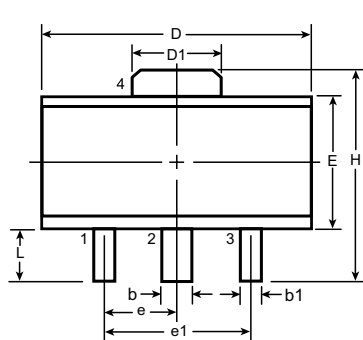


Features 特点

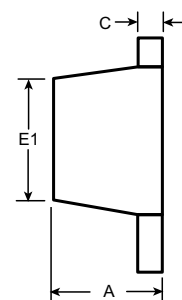
Pin 脚位: 1.Output 输出 2.Ground 地 3.Input 输入
 Output Voltage 输出电压: 10V
 Output Current 输出电流: 0.1A
 Power dissipation 耗散功率: 0.5W



SOT-89 PACKAGE OUTLINE



Top View



Side View

Symbol		A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00 ¹	1.50 BSC	3.00 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-			-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29			4.25	1.20

Dimensions in mm

Absolute Maximum Ratings 最大额定值

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Input Voltage 输入电压	V_i	35	V
Operating Current 工作电流	I_o	100	mA
Power dissipation 耗散功率	P_D	500	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	200	$^{\circ}\text{C}/\text{W}$
Solder Temperature 焊接温度/时间	T_d	260	$^{\circ}\text{C}$
Solder Temperature/Time 焊接时间	T_d	10	S
Operating Ambient Temperature 工作温度	T_A	-20~+120	$^{\circ}\text{C}$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	125, -55to+150	$^{\circ}\text{C}$

78L10

Electrical Characteristics 电特性

($V_I=16V$ $I_O=40mA$ $C_i=0.33\mu F$ $C_o=0.1\mu F$ $T_A=25^\circ C$ unless otherwise noted 如无特殊说明)

Characteristic 特性参数	Symbol 符号	Test Condition 测试条件	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Output Voltage 输出电压	V_O	$V_I=19V$ $I_O=40mA$	9.5	10	10.5	V
Output Voltage 输出电压	V_O	$12.5V \leq V_I \leq 25V$ $1mA \leq I_O \leq 40mA$	9.3		10.7	V
Output Voltage 输出电压	V_O	$13V \leq V_I \leq 25V$ $1mA \leq I_O \leq 50mA$	9.3		10.7	V
Output Current 输出电流	I_O	$V_I=16V$		100		mA
Dropout Voltage 落差电压	V_D	$I_O=40mA$		1.7		V
Quiescent Current 静态电流	I_q	$V_I=16V$ $I_O=0$		2	4.3	mA
Quiescent Current Change 静态电流变化	ΔI_q	$13V \leq V_I \leq 25V$			1.5	mA
Quiescent Current Change 静态电流变化	ΔI_q	$1mA \leq I_O \leq 40mA$			0.1	mA
Line Regulation 线性调整	ΔV_O	$I_O=40mA$ $12.5V \leq V_I \leq 25V$		25	230	mV
Line Regulation 线性调整	ΔV_O	$I_O=40mA$ $13V \leq V_I \leq 25V$		20	170	mV
Load Regulation 负载调整	ΔV_O	$1mA \leq I_O \leq 100mA$ $V_I=16V$		25	90	mV
Load Regulation 负载调整	ΔV_O	$1mA \leq I_O \leq 40mA$ $V_I=16V$		12	75	mV
Temperature Coefficient of V_O 输出电压温度系数	$\Delta V_O / \Delta T$	$I_O=5mA$		-1.0		mV/ $^\circ C$
Output Noise Voltage 噪声电压	V_N	$10Hz \leq f \leq 100kHz$		80		μV
Ripple Rejection 纹波抑制	RR	$13V \leq V_I \leq 24V$ $f=120Hz$		43		dB