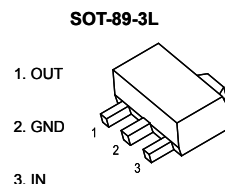


FEATURE

Output Voltage 输出电压: **10V**
Output Current 输出电流: **0.1A**
Power dissipation 耗散功率: **0.5W**



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	$^{\circ}\text{C}$

possible to the regulators.

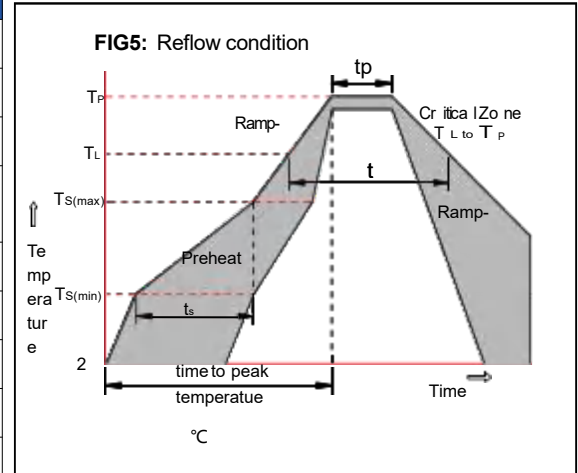
Electrical Characteristics 电特性

($V_i=16V$ $I_o=40mA$ $C_i=0.33\mu F$ $C_o=0.1\mu F$ $T_A=25^\circ C$ 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

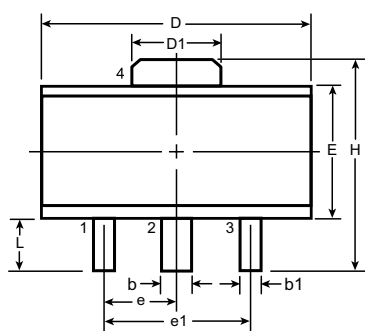
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C

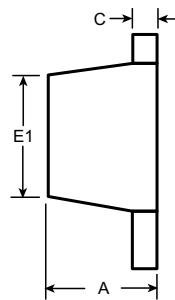


Package Dimensions & Suggested Pad Layout

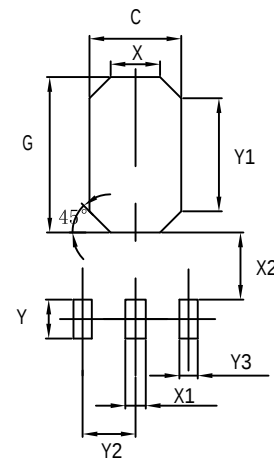
SOT89



Top View



Side View

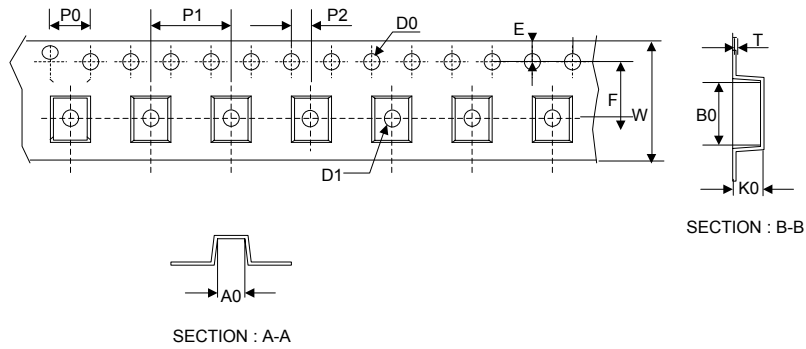


Symbol		A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00†	1.50 BSC	3.00 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-			-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29			4.25	1.20

Dimensions	Value (in mm)
C	2.50
G	3.60
X	1.40
X1	0.90
X2	0.90
Y	1.40
Y1	2.60
Y2	1.50
Y3	0.90

Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.60±0.20
D1	1.60±0.20
E	1.75±0.20
F	7.50±0.15
W	16.00±0.20
A0	6.30±0.20
B0	8.25±0.20
K0	2.60±0.20
T	0.23±0.10
D2	180.0±5.0
D3	60Min.
D4	R32.0±2.0
G	R86.5±2.0
H	R30.0±2.0
I	13.0±2.0
W1	13.20±2.0
W2	16.50±2.0
Quantity: 1000PCS	

13" Reel

