

/ Descriptions

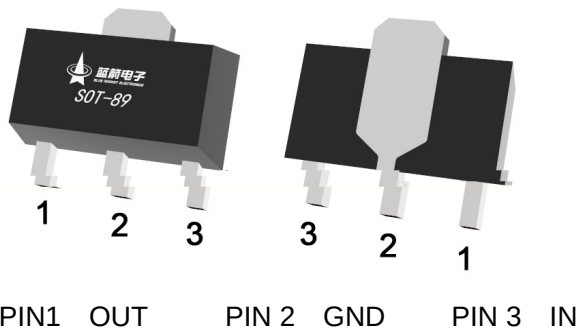
SOT-89

Voltage Regulator in a SOT-89 Plastic Package.

100mA,

3-Terminal regulators ,output current up to 100 mA, internal thermal overload protection and short-circuit limiting, HF Product.

Voltage Regulator.



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Input voltage	V_I	36	V
Output current	I_O	100	mA
Operating virtual Junction temperature	T_J	0 125	
Power Dissipation	P_D	500	mW
Storage temperature range	T_{stg}	-65 150	
Thermal resistance junction-ambient	$R_{\theta JA}$	200	$^{\circ}\text{C}/\text{W}$

/ Electrical Characteristics($T_a=25^\circ\text{C}$ $V_I=19\text{V}, I_O=40\text{mA}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	$I_O=40\text{mA}$ $T_J=25^\circ\text{C}$	11.5	12	12.6	V
		$I_O=1\text{mA}$ to 40mA $V_I=14.5\text{V}$ to 27V	11.4		12.6	V
		$I_O=1\text{mA}$ to 70mA $V_I=19\text{V}$	11.4		12.6	V
Input regulation	V_O	$V_I=14.5\text{V}$ to 27V $T_J=25^\circ\text{C}$		24	250	mV
		$V_I=16\text{V}$ to 27V $T_J=25^\circ\text{C}$		12	200	mV
Output regulation	V_O	$I_O=1\text{mA}$ to 100mA $T_J=25^\circ\text{C}$		36	100	mV
		$I_O=1\text{mA}$ to 40 mA $T_J=25^\circ\text{C}$		24	50	mV
Ripple rejection	RR	$V_I=15\text{V}$ to 25V $f=120\text{Hz}$ $T_J=25^\circ\text{C}$	36	42		dB
Output noise voltage	V_N	$f=10\text{Hz}\sim 100\text{KHz}$ $T_J=25^\circ\text{C}$		80		μV
Dropout voltage	V_D	$T_J=25^\circ\text{C}$		2		V
Bias current	I_Q	$T_J=25^\circ\text{C}$		2.0	5.5	mA
Bias current change	I_Q	$V_I=16\text{V}$ to 27V			1.5	mA
		$I_O=1\text{mA}$ to 40mA			0.1	mA

/ Electrical Characteristic Curve

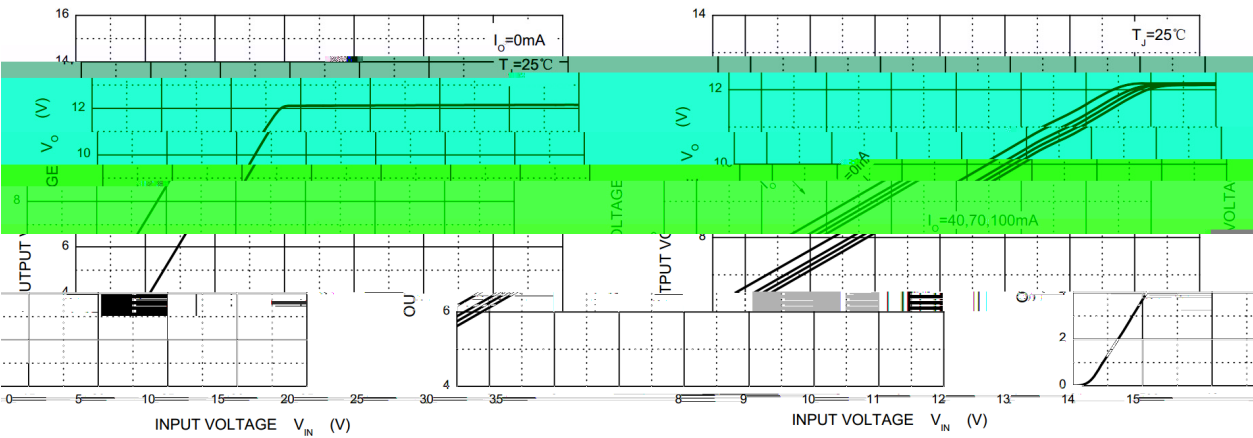


Figure 1. Output Voltage vs Input Voltage Characteristics

Figure 2. Load Regulation Characteristics

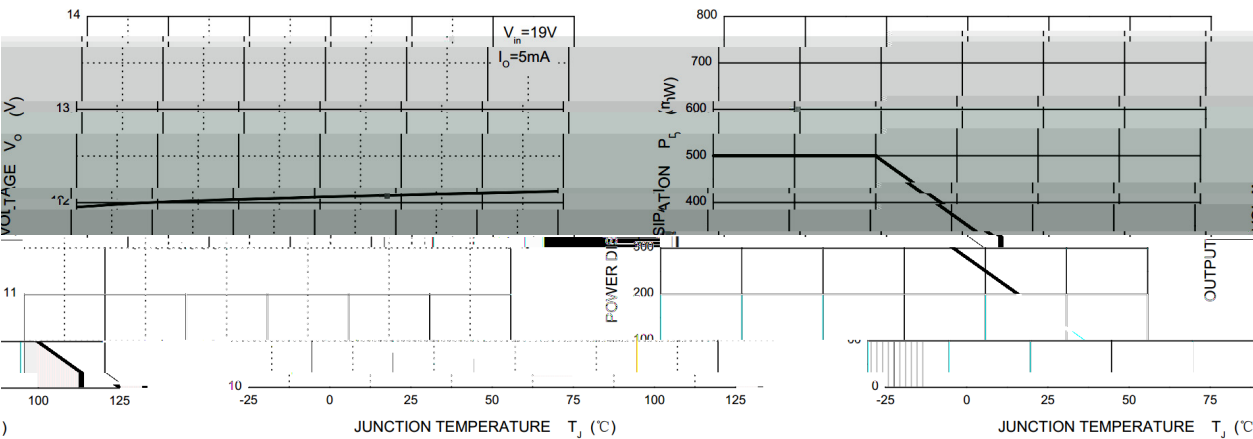
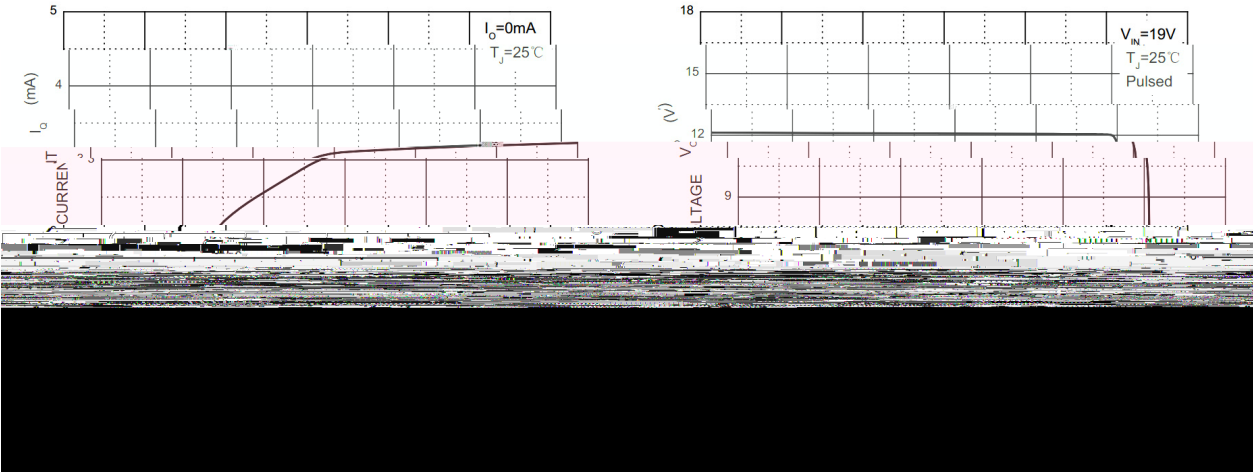


Figure 5. Output Voltage vs Junction Temperature

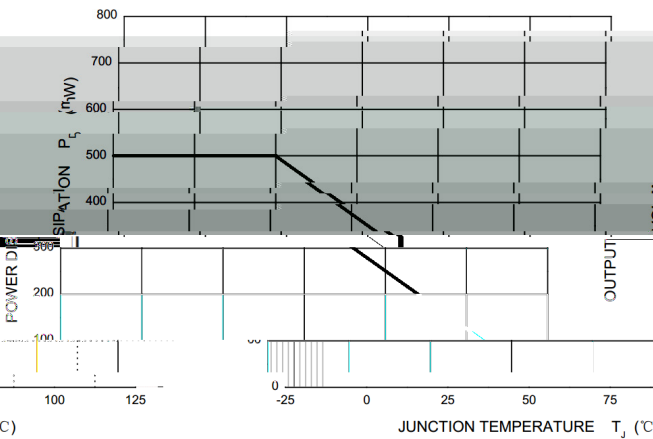
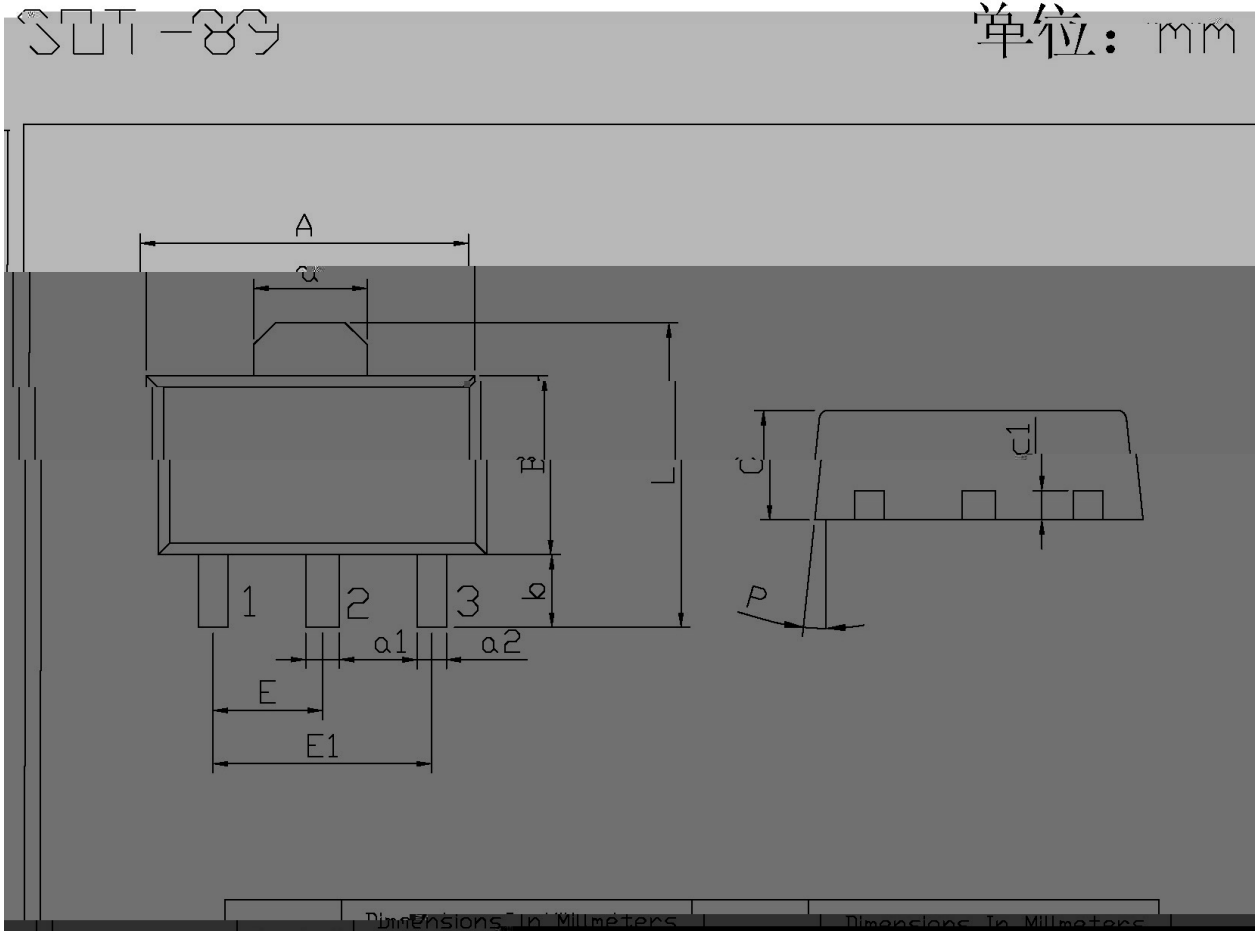
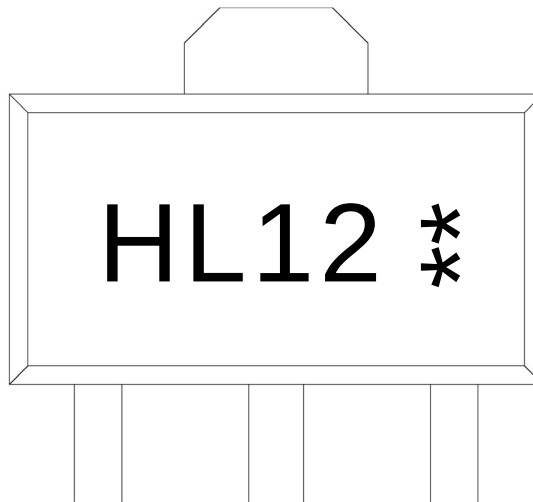


Figure 6. Power Derating Curve

单位: mm



/ Marking Instructions



H

L12

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Note:

H: Company Code

L12: Product Type Code

** : Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1 150