

/ Descriptions

SOT-89

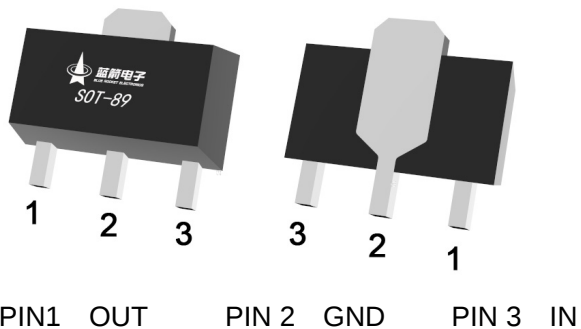
Voltage Regulator in a SOT-89 Plastic Package.

100mA,

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

Voltage Regulator.

/ Equivalent Circuit or Application Circuit



/ 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
		$I_O=1\text{mA to } 40\text{mA}$ $V_I=14.5\text{V to } 27\text{V}$	11.4		12.6	V
		$I_O=1\text{mA to } 70\text{mA}$ $V_I=19\text{V}$	11.4		12.6	V
Input regulation	V_O	$V_I=14.5\text{V to } 27\text{V}$ $T_J=25^\circ\text{C}$		24	250	mV
		$V_I=16\text{V to } 27\text{V}$ $T_J=25^\circ\text{C}$		12	200	mV
Output regulation	V_O	$I_O=1\text{mA to } 100\text{mA}$ $T_J=25^\circ\text{C}$		36	100	mV
		$I_O=1\text{mA to } 40\text{mA}$ $T_J=25^\circ\text{C}$		24	50	mV
Ripple rejection	RR	$V_I=15\text{V to } 25\text{V}$ $f=120\text{Hz}$ $T_J=25^\circ\text{C}$	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	$V_I=16\text{V to } 27\text{V}$			1.5	mA
		$I_O=1\text{mA to } 40\text{mA}$			0.1	mA

/ Electrical Characteristic Curve

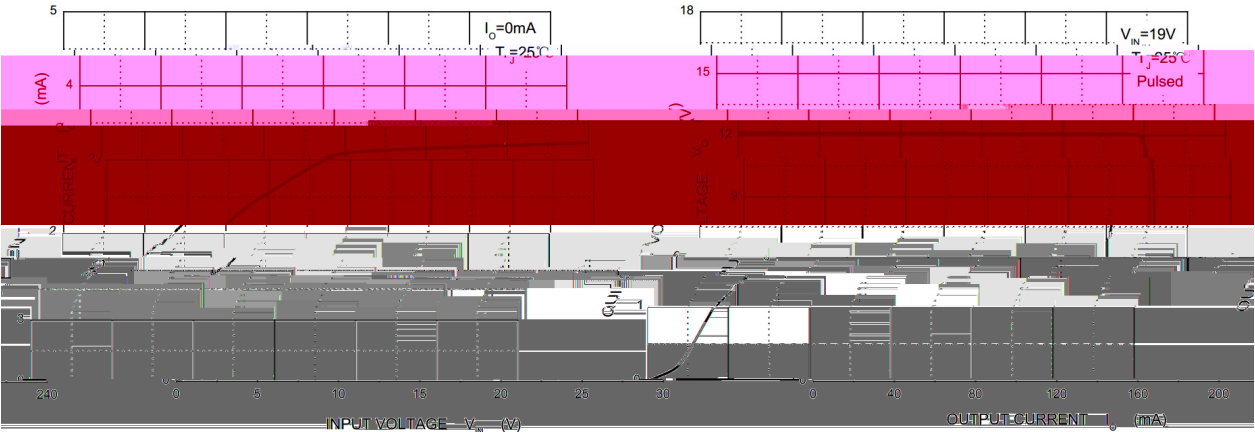
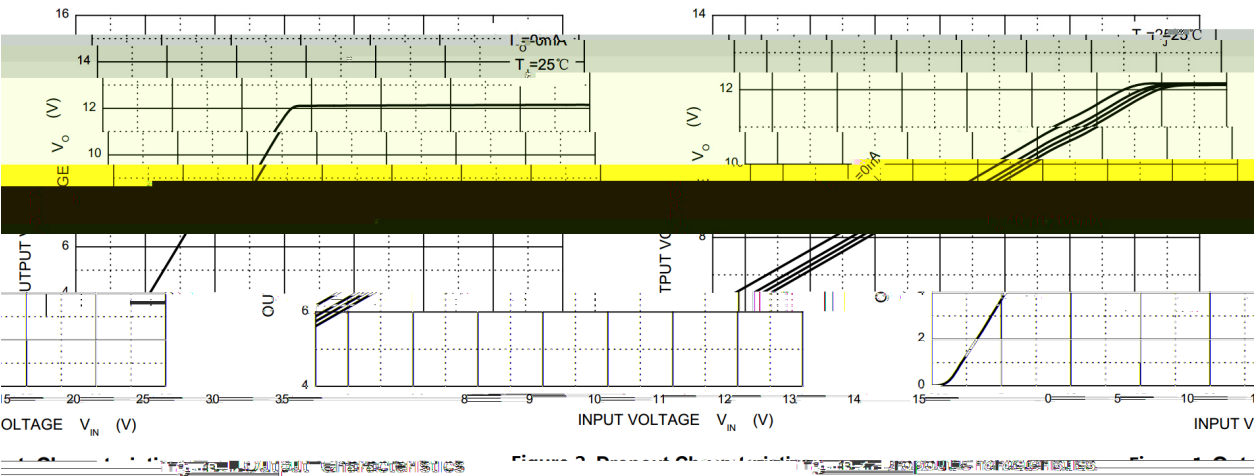


Figure 3. Quiescent Current

Figure 4. Current Cut-off Grid Voltage

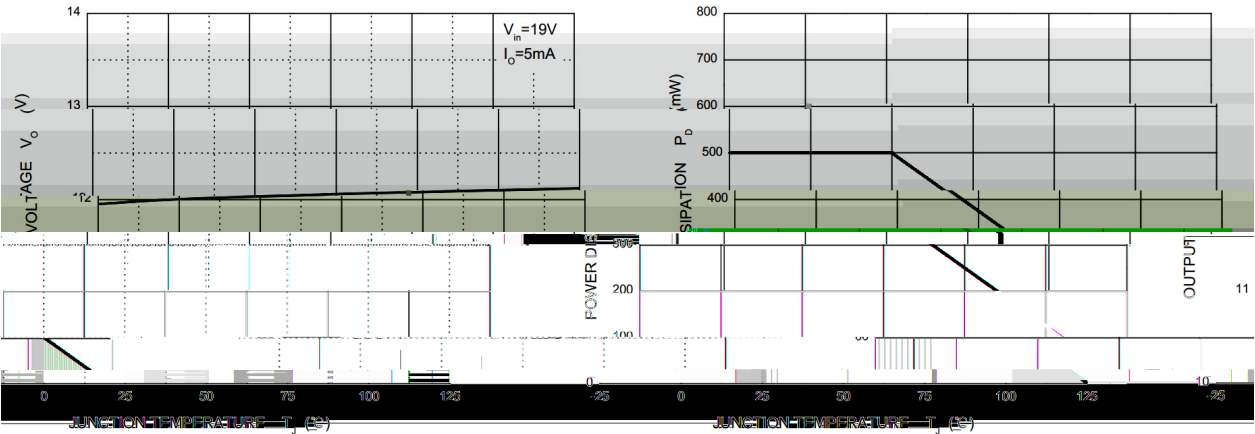


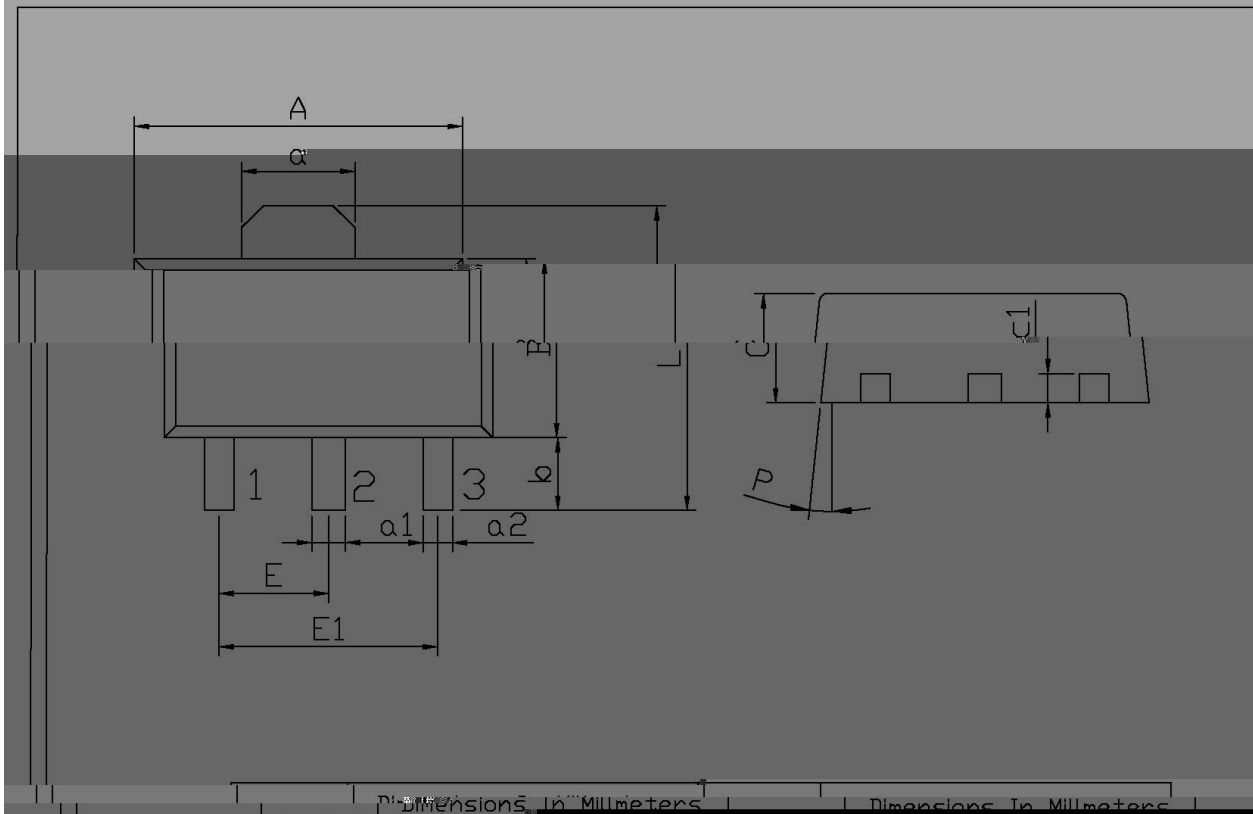
Figure 5. Output Voltage vs Junction Temperature

Figure 6. Power Derating Curve

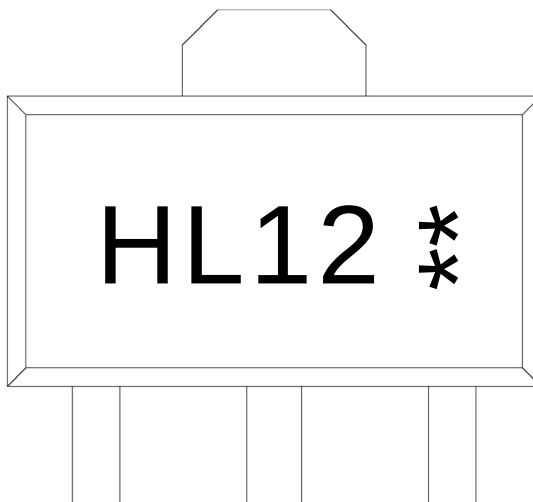
/ Package Dimensions

SOT-89

单位: 



/ Marking Instructions



H

L12

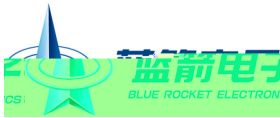
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Note:

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