

/ Descriptions

SOT-89

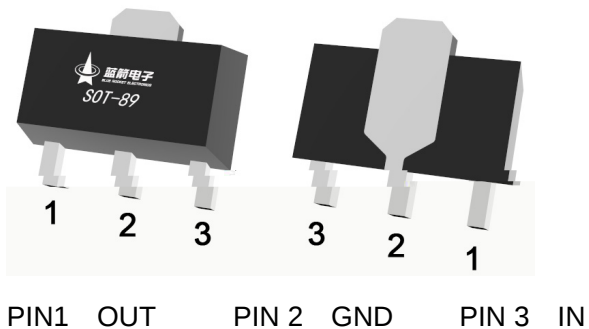
Voltage Regulator in a SOT-89 Plastic Package.

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(Ta=25)

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	/W

/ Electrical Characteristics(Ta=25 $V_I=19V, I_O=40mA$ unless otherwise specified)

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

/ Electrical Characteristic Curve

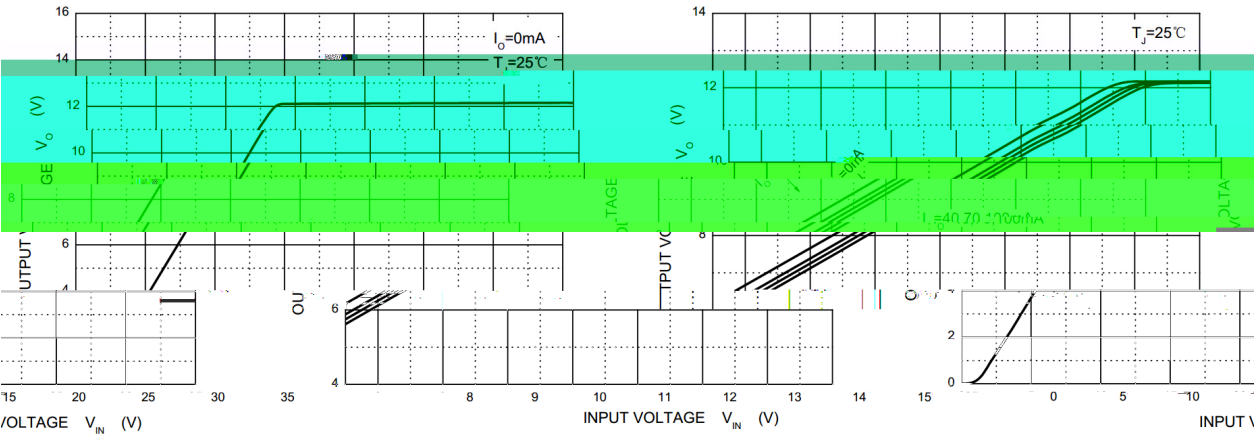


Figure 2. Quiescent Characteristics

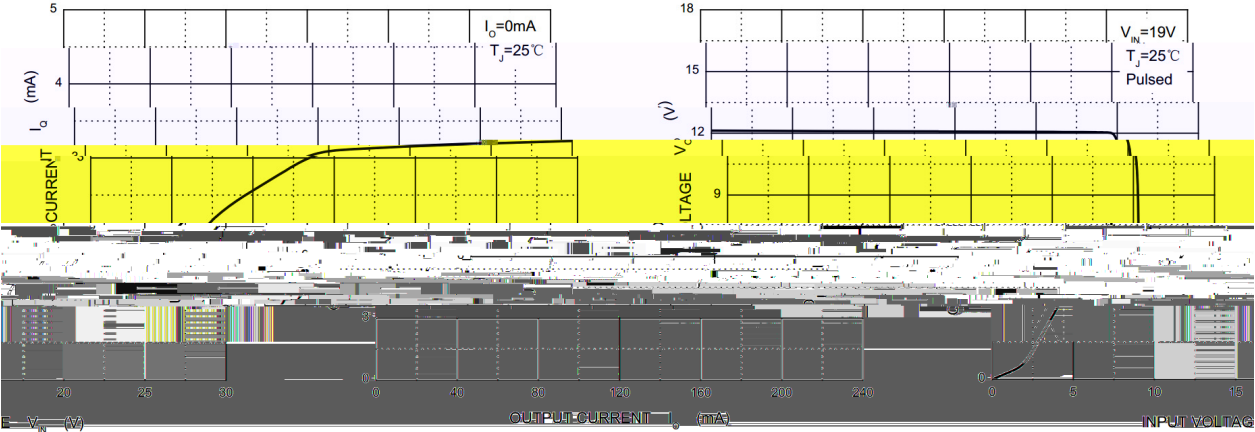


Figure 3. Quiescent Current

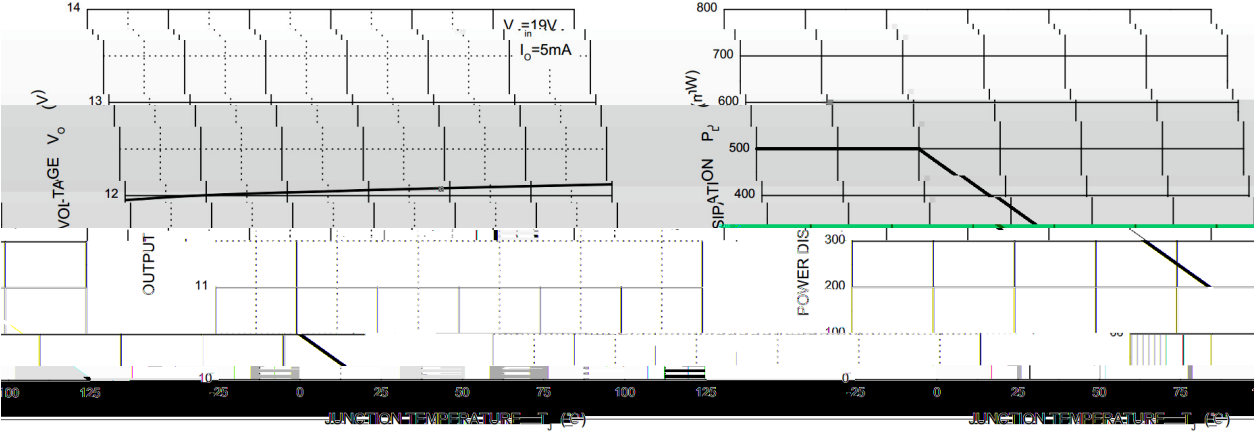


Figure 4. Current Cut-off Grid Voltage

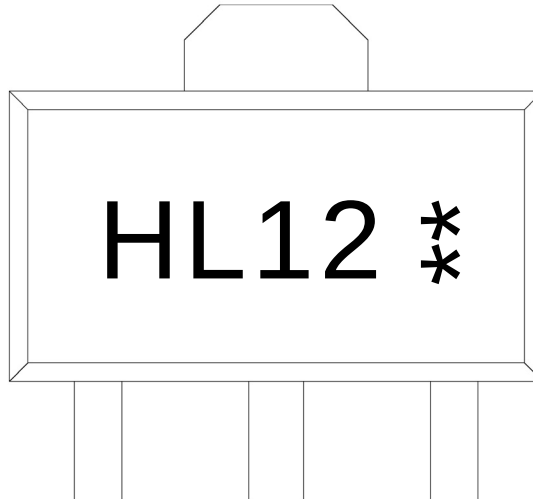
Figure 5. Output Voltage vs Junction Temperature

Figure 6. Power Derating Curve

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