

**/ Descriptions**

SOT-89 Voltage Regulator in a SOT-89 Plastic Package.

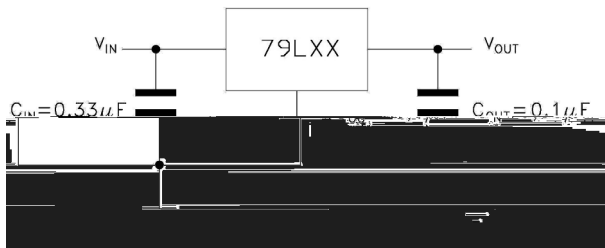
**/ Features**

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

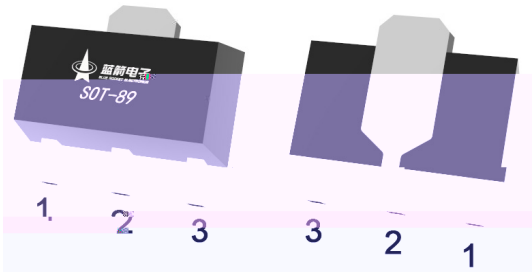
**/ Applications**

Voltage Regulator.

**/ / Equivalent Circuit or Application Circuit**



**/ Pinning**



PIN 1 GND    PIN 2 IN    PIN 3 OUT

**/ Marking**

Marking	HN05 **
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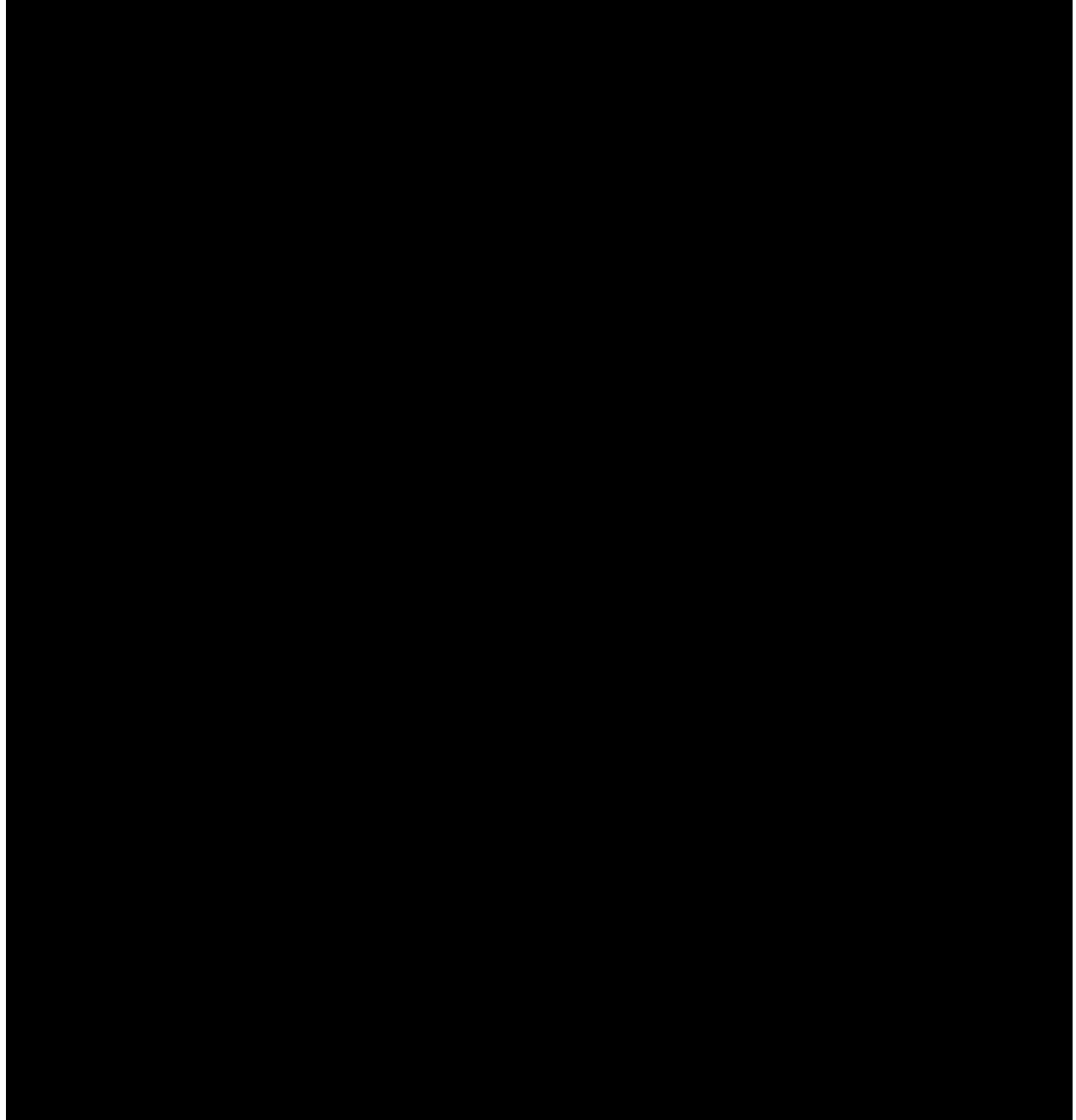
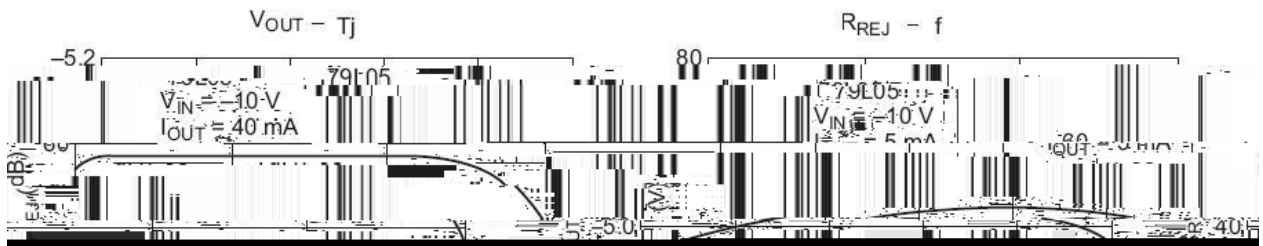
**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Input voltage	$V_i$	-35	V
Output current	$I_o$	100	mA
Operating virtual Junction temperature	$T_J$	-40 125	
Power Dissipation	$P_D$	500	mW
Storage temperature range	$T_{stg}$	-65 150	

**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$I_o=40mA$ $T_j=25$	-4.80	-5.0	-5.2	V
		-7.5V $V_{in}$ -20V 5mA $I_{out}$ 100mA	-4.75	-5.0	-5.25	
Line Regulation	REGline	-7.5V $V_{in}$ -20V $I_o=40mA$ $T_j=25$		50	150	mV
Load Regulation	REGload	5mA $I_{out}$ 100mA $T_j=25$		20	60	
		5mA $I_{out}$ 40mA $T_j=25$		10	30	
Bias current	$I_Q$	$I_{out}=0$ $T_j=25$		3	6	mA
Bias current change	$I_Q$	-8V $V_{in}$ -20V			1.5	
		1mA $I_{out}$ 40mA			0.1	
Output noise voltage	$V_N$	10Hz $f$ 100KHz $T_j=25$		40		$\mu V$
Ripple rejection	RR	-8V $V_{in}$ -18V $f=120Hz,$	41	49		dB
Dropout voltage	$V_D$	$T_j=25$		1.7		V

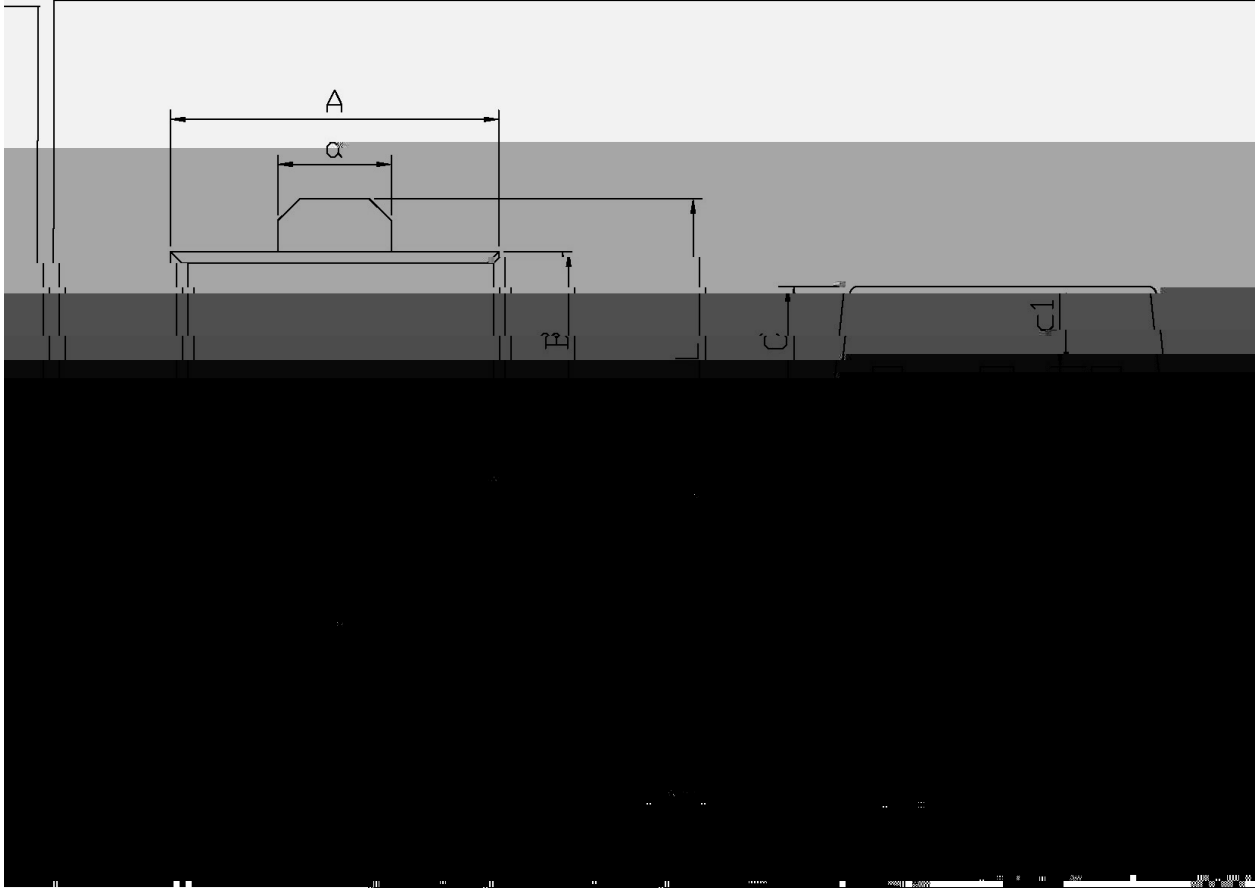
/ Electrical Characteristic Curve



/ Package Dimensions

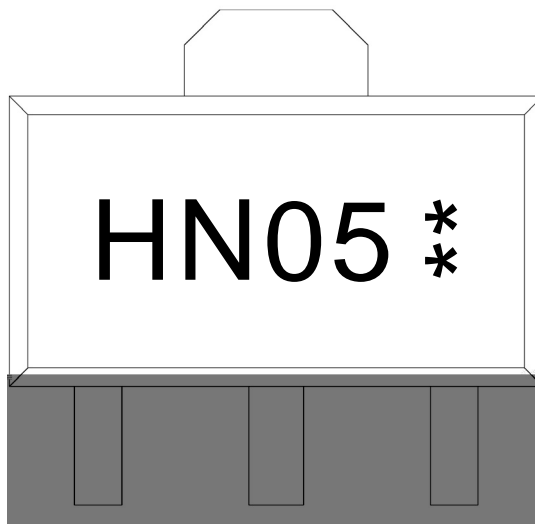
79L05T-89

单位: mm



Symbol	Dimension	Value
$A$	Width	10.0
$a$	Width	4.0
$H$	Height	1.5
$C$	Width	10.0
$D$	Width	10.0

/ Marking Instructions



H

N05

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Note:

H: Company Code

N05: Product Type Code

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

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


Note:

- |   |           |             |   |
|---|-----------|-------------|---|
| 1 | 150 ~ 180 | 60 ~ 90sec; | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5     | 5±0.5sec;   | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 ~ 10    | /sec.       | 3. Cooling Speed: 2~10 /sec.            |

**/ Resistance to Soldering Heat Test Conditions**

260±5                      10±1 sec.                      Temp.:260±5                      Time:10±1 sec

**/ Packaging SPEC.**

/ REEL