

描述 / Descriptions

SOT-89 塑封封装电压调整器。Voltage Regulator in a SOT-89 Plastic Package.

特征 / Features

三端稳压调整器，输出电流高达 100mA,内设过热保护和短路限制。

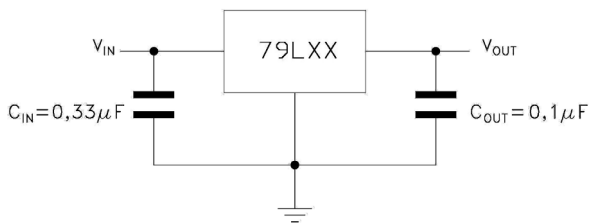
3-Terminal regulators, output current up to 100 mA, internal thermal overload protection and short-circuit limiting.

用途 / Applications

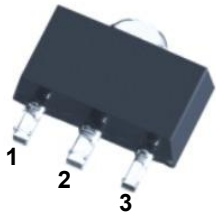
电压调整器。

Voltage Regulator.

内部等效电路/应用电路 / Equivalent Circuit or Application Circuit



引脚排列 / Pinning



PIN 1 : GND PIN 2 : IN PIN3 : OUT

印章代码 / Marking

Marking	HN05 *
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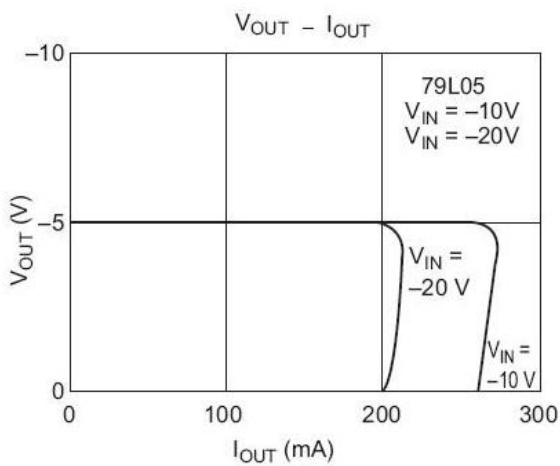
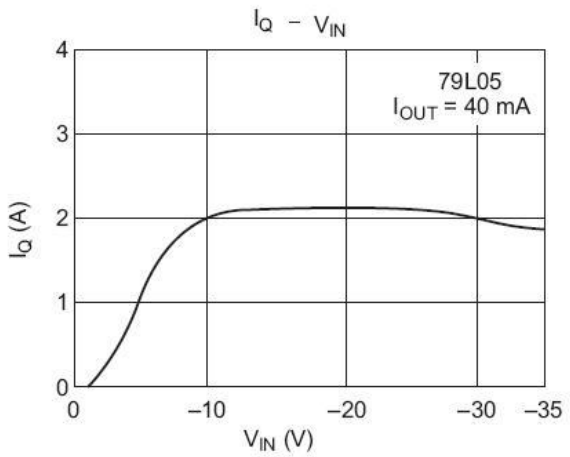
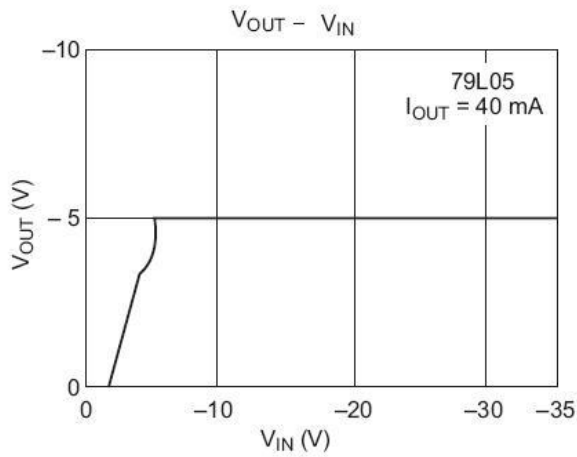
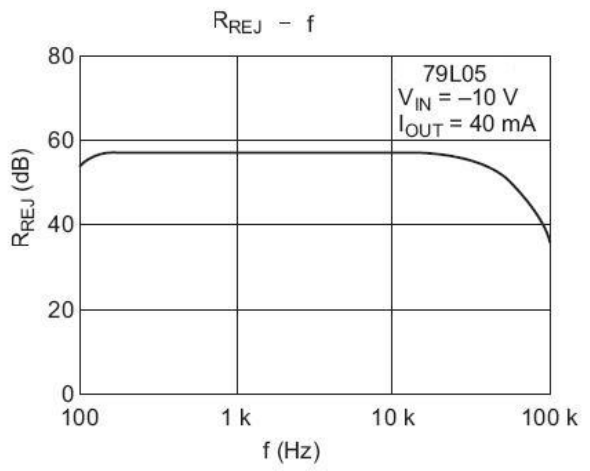
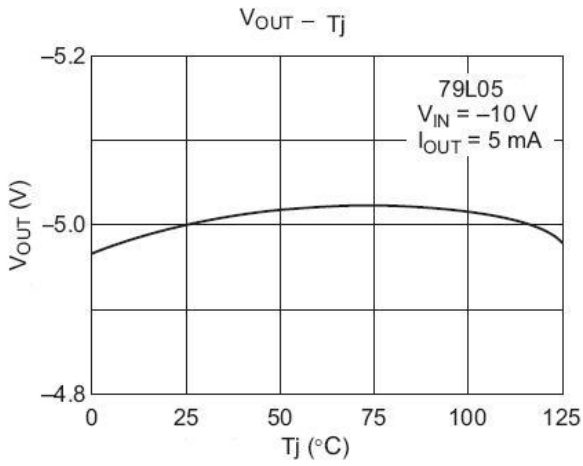
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Input voltage	V _I	-35	V
Output current	I _O	100	mA
Operating virtual Junction temperature	T _J	0~125	°C
Power Dissipation	P _D	500	mW
Storage temperature range	T _{stg}	-65~150	°C

电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Output voltage	V _O	I _o =40mA T _j =25°C	-4.80	-5.0	-5.2	V
		-7.5V≤Vin≤-20V 5mA≤Iout≤100mA	-4.75	-5.0	-5.25	
Line Regulation	REGline	-7.5V≤Vin≤-20V I _o =40mA T _j =25°C		50	150	mV
Load Regulation	REGload	5mA≤Iout≤100mA T _j =25°C		20	60	
		5mA≤Iout≤40mA T _j =25°C		10	30	
Bias current	I _Q	I _{out} =0 T _j =25°C		3	6	mA
		-8V≤Vin≤-20V			1.5	
Bias current change	ΔI _Q	1mA≤Iout≤40mA			0.1	
		10Hz≤f≤100KHz T _j =25°C		40		
Output noise voltage	V _N	-8V≤Vin≤-18V f=120Hz,	41	49		μV
Ripple rejection	RR	T _j =25°C		1.7		dB
Dropout voltage	V _D	T _j =25°C		0.15		V
Peak Output Current	I _o	I _{out} =0 T _j =25°C	-4.80	-5.0	-5.2	A

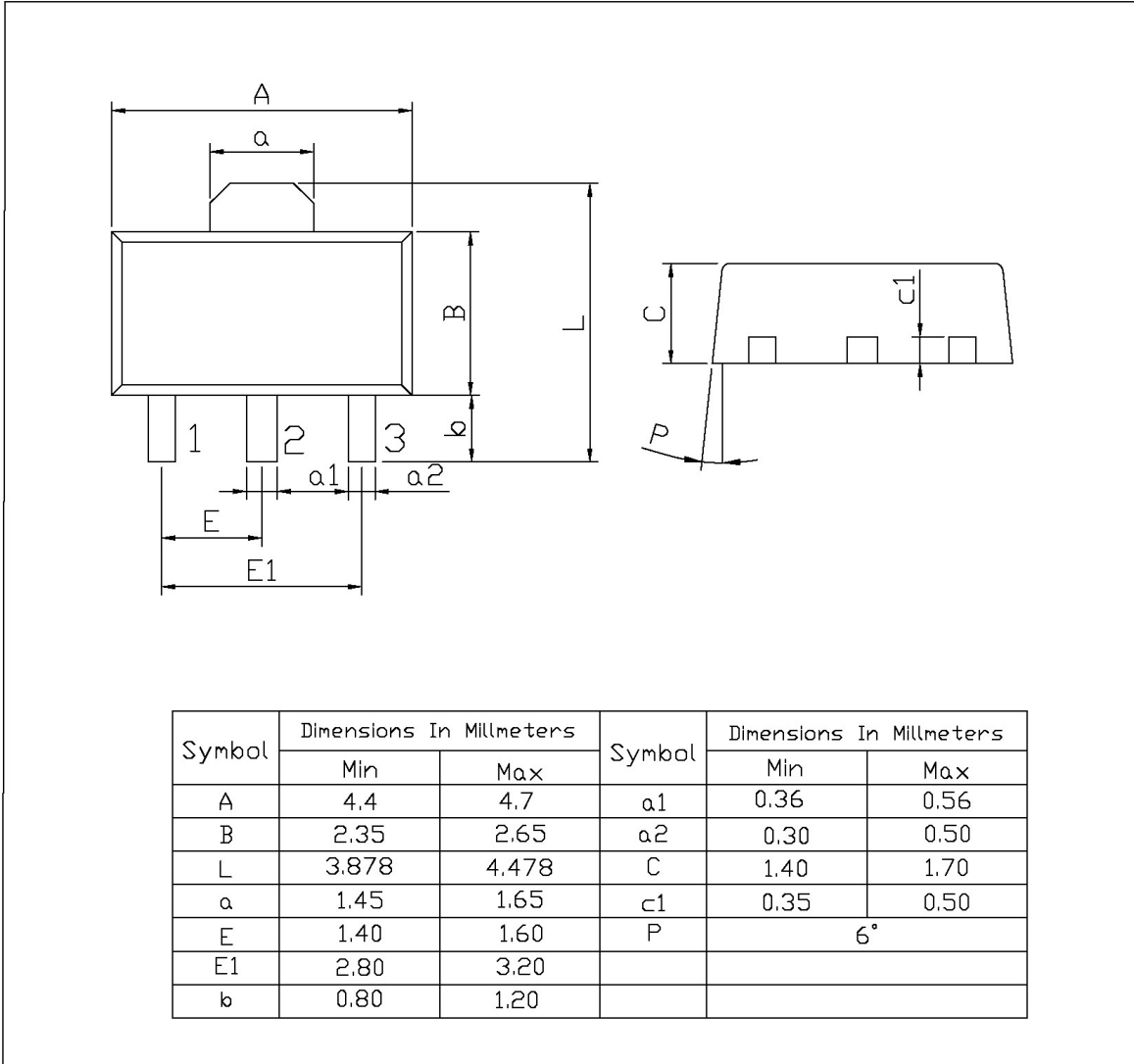
电参数曲线图 / Electrical Characteristic Curve



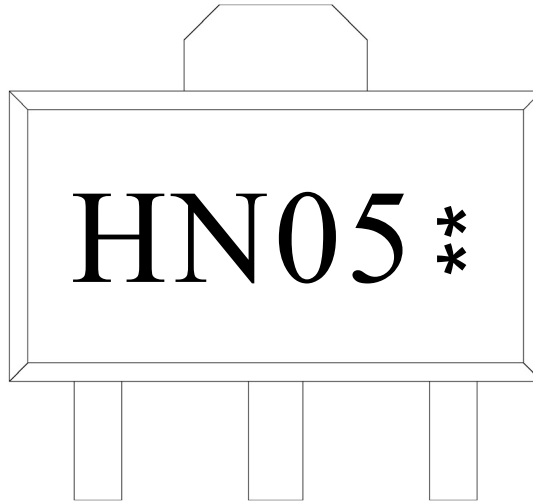
外形尺寸图 / Package Dimensions

SOT-89

单位: mm



印章说明 / Marking Instructions



说明：

H： 为公司代码

N05： 为型号代码

**： 为生产批号代码，随生产批号变化。

Note:

H: Company Code.

N05: Product Type Code.

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

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 25~150°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	6	42,000	7" ×12	180×120×180	390×385×205

使用说明 / Notices