

BRC07333HT

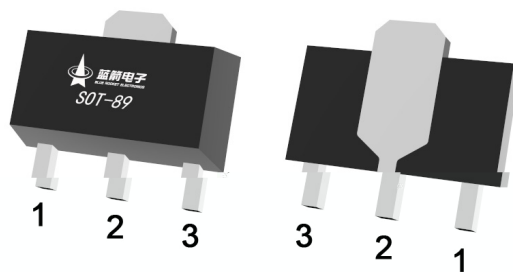
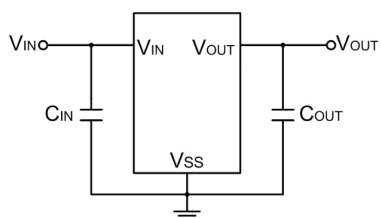
Rev.B Apr.-2024

SOT-89

Low dropout linear regulator in a SOT-89 Plastic Package .

- ◆ 2uA
- ◆ 300mA
- ◆ 200mV@100mA($V_{OUT}=3.3V$)
- ◆ $\pm 2\%$
- ◆ 70dB@1kHz
- ◆ 90uV_{RMS} 10Hz~100kHz
- ◆
- ◆
- ◆
- ◆

- ◆
- ◆
- ◆
- ◆
- ◆
- ◆



PIN1 1

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

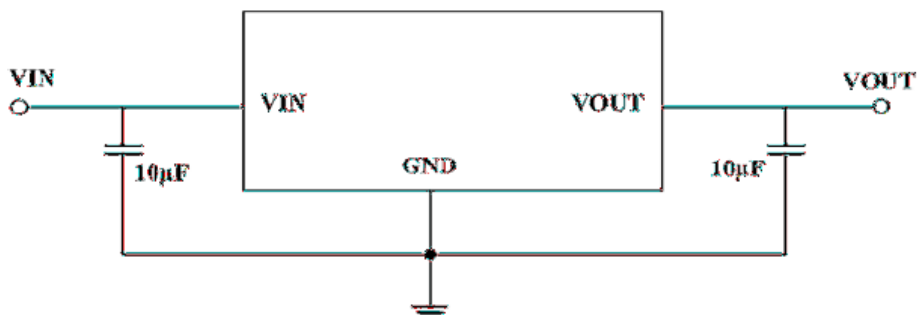
	V_{IN}	-0.3 to 40	V
	I_{OUT}	600	mA
	P_D	0.6	W
	T_{stg}	-40 to +125	$^\circ\text{C}$
	T_A	-40 to +125	$^\circ\text{C}$
10s	T_{sold}	260	$^\circ\text{C}$
	HBM	2	kV
	MM	200	V

/ Electrical Characteristics($T_A=25^\circ\text{C}$, $V_{IN}=V_{OUT}+1\text{V}$, $C_{IN}=C_{OUT}=1\mu\text{F}$, unless otherwise specified)

	V_{IN}				36	V
1	$V_{OUT\ E}$	$I_{OUT}=10\text{mA}$	3.234	3.3	3.366	V
2	V_{dif}	$I_{OUT}=100\text{mA}$ $V_{OUT}=3.3\text{V}$		200		mV
	I_{SS}	$I_{OUT}=0\text{mA}$		2	5	μA
	V_{load}	$V_{IN}=V_{OUT\ S}+1\text{V}$ $1\text{mA } I_{OUT} 300\text{mA}$		15	50	mV
	$\frac{V_{OUT}}{(V_{IN}*V_{OUT})}$	$I_{OUT}=10\text{mA}$ $V_{OUT\ S}+1\text{V } V_{IN}$ 36V		0.01	0.1	%/V
	$\frac{V_{OUT}}{(T_A*V_{OUT})}$	$I_{OUT}=10\text{mA}$ -40 T_A 125		50		ppm/
	I_{LIM}	$V_{OUT}=0.5 \times V_{OUT(Normal)}$, $V_{IN}=5\text{V}$	350			mA
	I_{SHORT}	$V_{OUT}=V_{SS}$		100		mA
	PSRR	$I_{OUT}=50\text{mA } f=100\text{Hz}$		75		dB
		$I_{OUT}=50\text{mA } f=1\text{kHz}$		70		
		$I_{OUT}=50\text{mA } f=10\text{kHz}$		55		
		$I_{OUT}=50\text{mA } f=100\text{kHz}$		40		

/ Typical Application Circuit

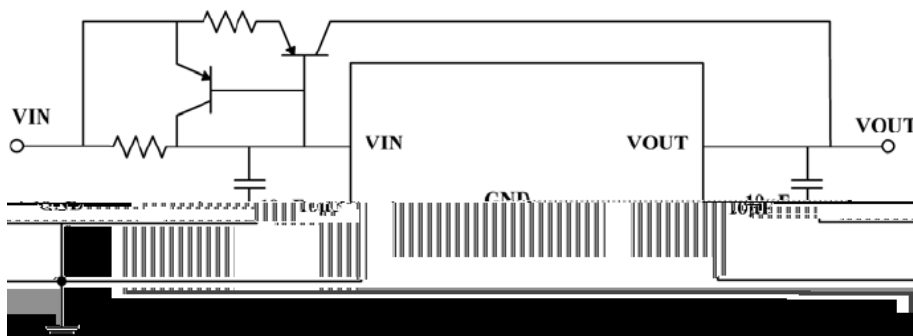
/ Basic Application



/ High Output Current Voltage Regulator

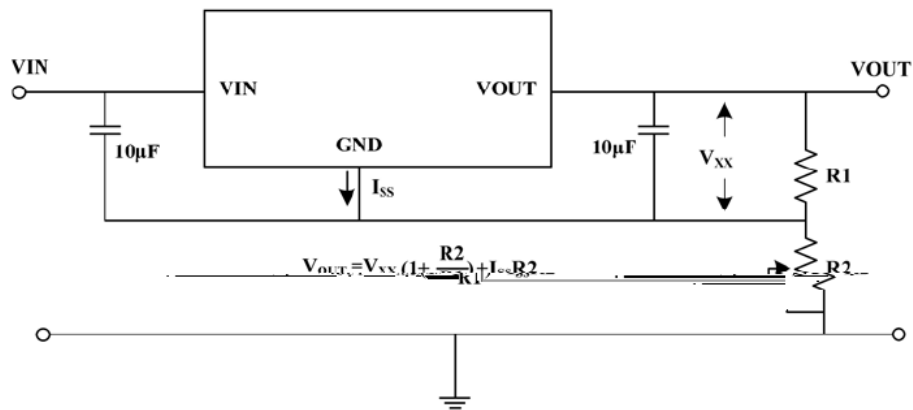


/ Short-Circuit Protection

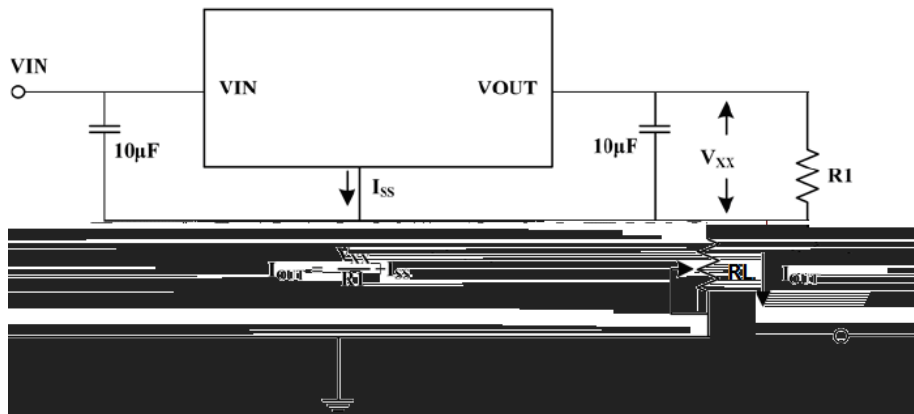


/ Typical Application Circuit

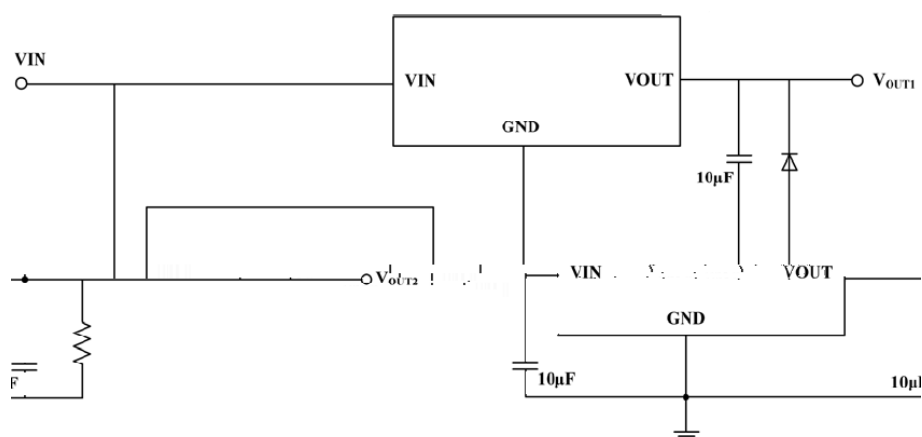
/ Circuit for Increasing Output Voltage



/ Constant Current Regulator



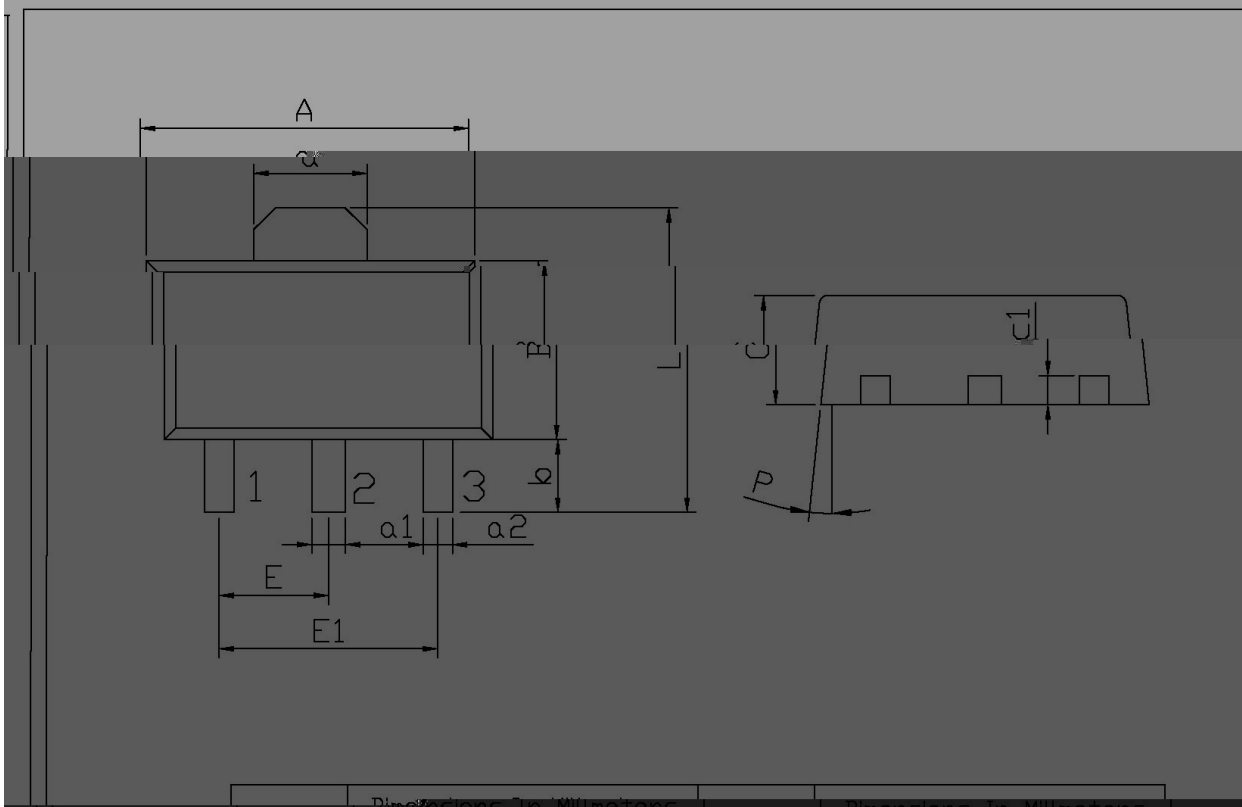
/ Double Output Circuit



/ Package Dimensions

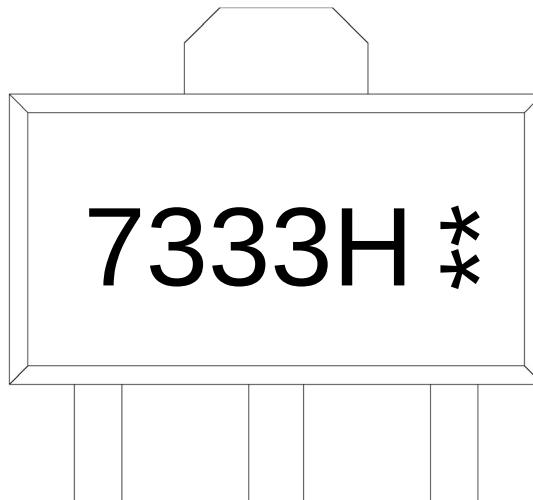
SUT-89

单位: mm





/ Marking Instructions



7333H

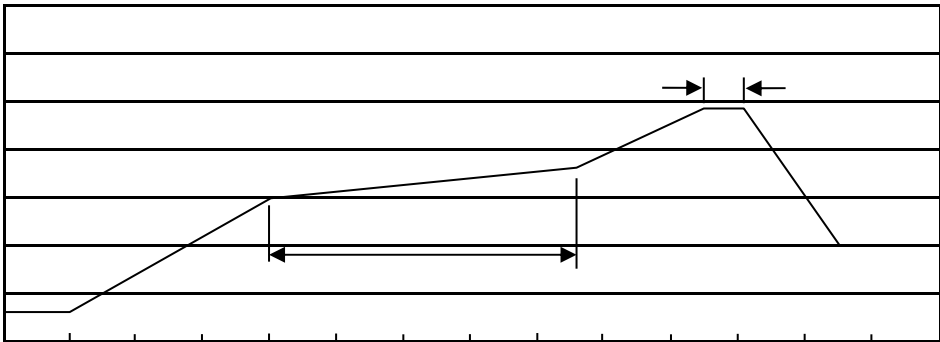
**

Note:

7333H: 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

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱
SOT-89	1,000	10	10,000	4	40,000	7 ×12	210×205×205	445×435×230

/ Notices