/ Descriptions

SOT-89

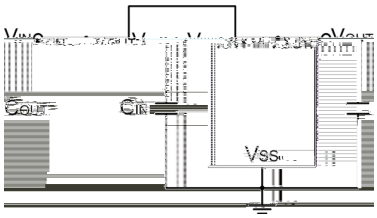
Low dropout linear regulator in a SOT-89 Plastic Package .

/ Features

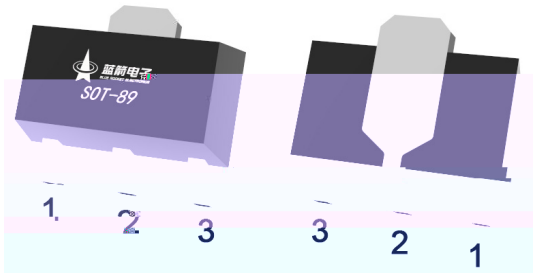
- 2uA
- 250mA
- 450mV@100mA(V_{OUT}=5.0V)
- ±2%
- 70dB@1kHz
- 90uV_{RMS} 10Hz~100kHz

/ Applications

/ Equivalent Circuit



/ Pinning



PIN1 GND PIN 2 VIN PIN 3 VOUT

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

	V_{IN}	-0.3 to 40	V
	I_{OUT}	250	mA
	P_D	0.6	W
	T_{stg}	-40 to +125	°C
	T_A	-40 to +85	
10s	T_{sold}	260	°C
	HBM	2	kV
	MM	200	V

Notes: If the device operating conditions over the maximum rating of the above-mentioned conditions, may cause permanent damage to the device. The above parameters is only part of the operating conditions the maximum, we do not recommend the device running outside the scope of this specification. If the device to work long hours under the condition of absolute maximum limit, its stability may be affected.

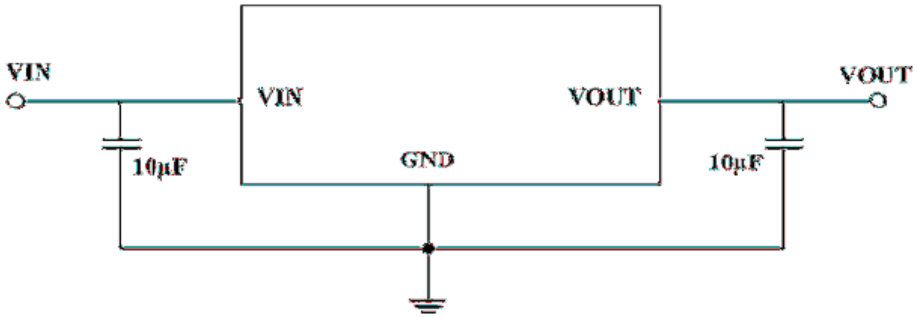
/ Electrical Characteristics(T_A=25 , V_{IN}=V_{OUT}+2V, C_{IN}=C_{OUT}=1uF, unless otherwise specified)

	V_{IN}				36	V
1	V_{OUT} E	I_{OUT}=10mA	4.9	5.0	5.1	V
2	V_{dif}	I_{OUT}=100mA V_{OUT}=5.0V		450		mV
	I_{SS}	I_{OUT}=0mA		2	5	uA
	V_{load}	V_{IN}=V_{OUT} s +2V 1mA I_{OUT} 250mA		20	50	mV
	V_{line}	I_{OUT}=10mA V_{OUT} s +2V V_{IN} 36V		10	50	mV
	V_{OUT}/ (T_A*V_{OUT})	I_{OUT}=10mA -40 T_A 85		50		ppm/
	I_{LIM}	V_{OUT}= 0.5 x $V_{OUT(Normal)}$, V_{IN} = 7.0V		350		mA
	I_{SHORT}	V_{OUT}=V_{SS}		100		mA

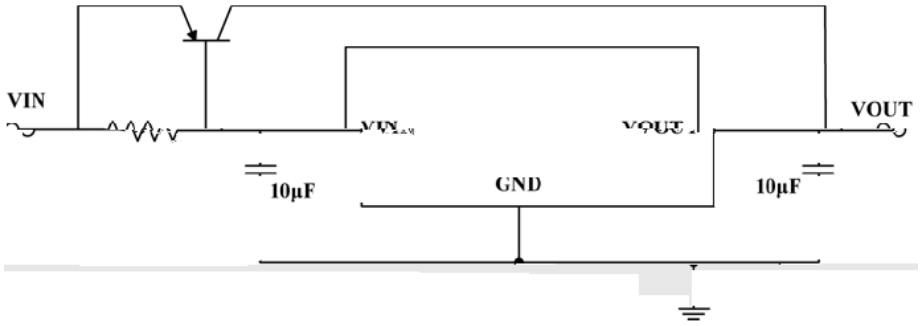
BRCO7550HT

/ Typical Application Circuit

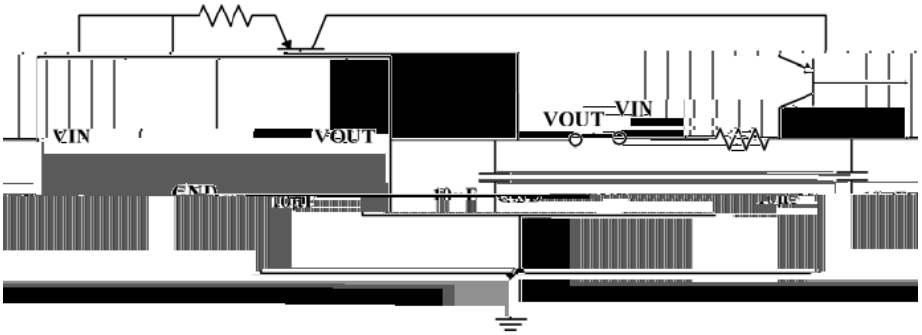
/ Basic Application



/ High Output Current Voltage Regulator

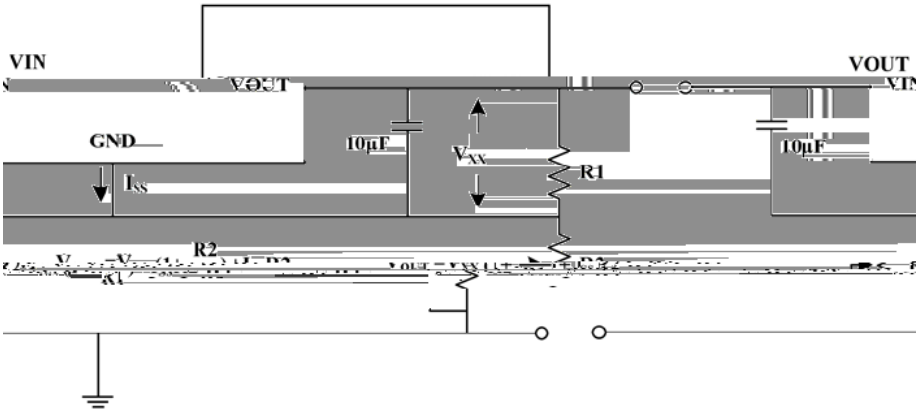


/ Short-Circuit Protection

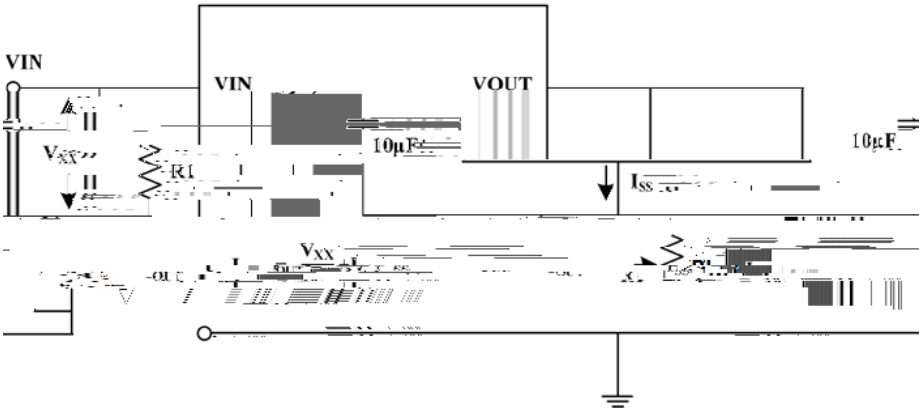


/ Typical Application Circuit

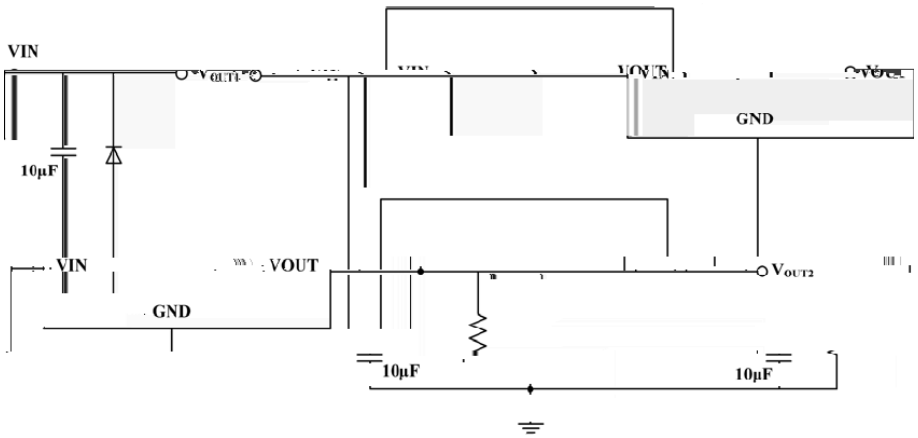
/ Circuit for Increasing Output Voltage



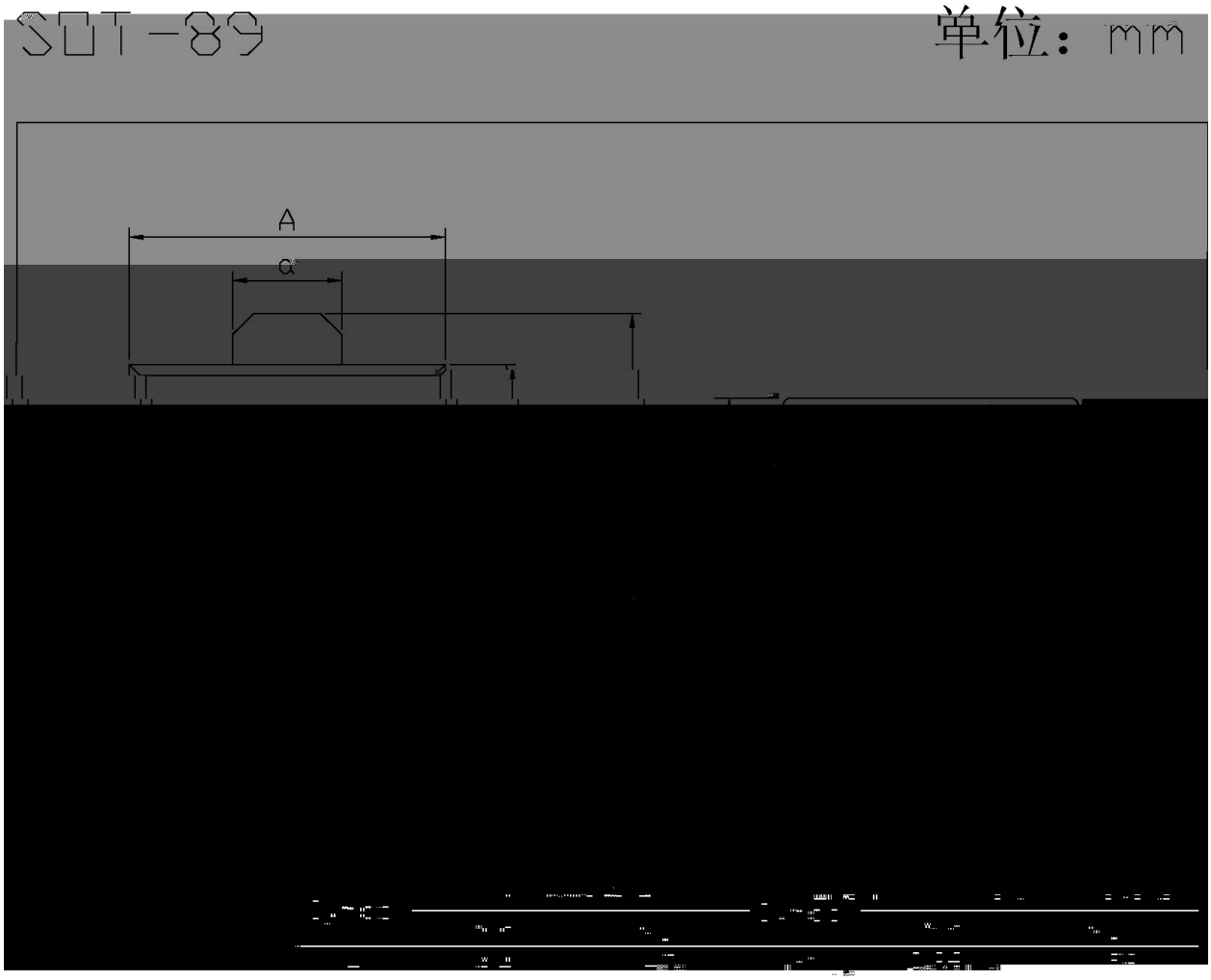
/ Constant Current Regulator



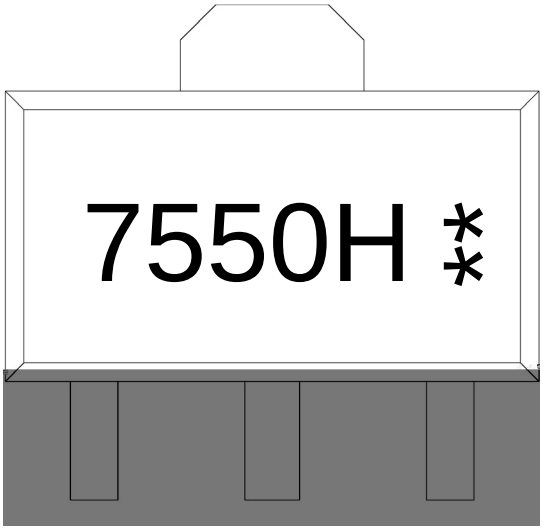
/ Double Output Circuit



/ Package Dimensions



/ Marking Instructions



7550H

**

Note:

7550H: 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	Units	Dimension	(unit mm³) Ă