/ Revised record

D	2015-11				
E	2020-5	1			
F	2021-4-15	1 2	3% 2%		
A	2022-5-27	ALL	Pin1 Pin2 , IOUT@7V≥150mA		

/ Descriptions

SOT-89

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

/ Features

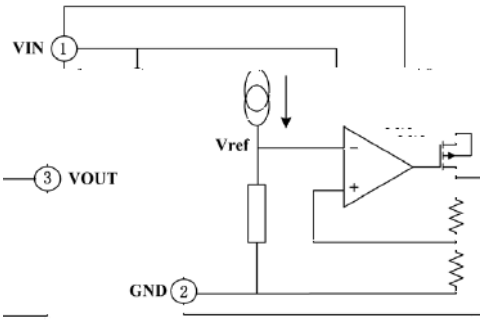
30V	2.5μA	2%

Low power consumption,Low voltage drop,Small temperature drift coefficient,High input voltage up to 30V,The static current 2.5μA,The output voltage accuracy:±2%.HF Product.

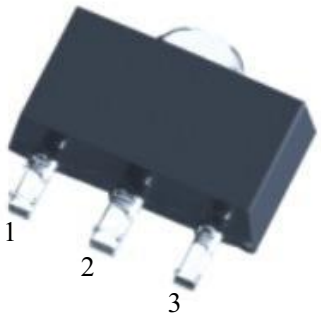
/ Applications

For use in power equipment,Communication equipment,Audio and video equipment.

/ Equivalent Circuit



/ Pinning



PIN1 VIN PIN 2 GND PIN 3 VOUT

/ Marking

/ See Marking Instructions.

Parameter	Symbol	Rating	Unit
Working Voltage	V_{IN}	-0.3~33	V
Thermal Resistance	$R_{\theta JA}$	200	℃/W
Power Consumption	P_W	500	mW
Storage Temperature	T_{STG}	-50~+125	℃
Working Temperature	T_A	-40~+85	℃

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.

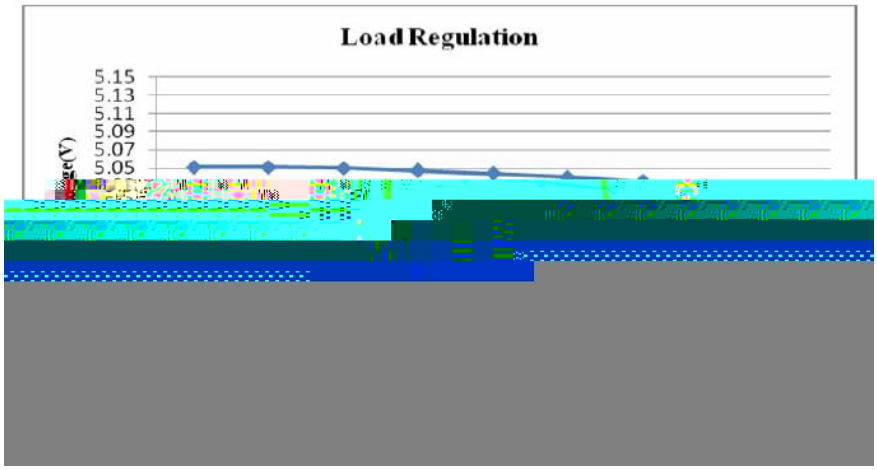
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
The Output Voltage	V_{OUT}	V_{IN}=7.0V,I_{OUT}=10mA	4.90	5.00	5.10	V
The Output Current	I_{OUT}	V_{IN}=7.0V	150			mA
Load Regulation	$\triangle V_{OUT}$	V_{IN}=7.0V 1mA≤I_{OUT}≤150mA		25	60	mV
Low Dropout	V_{DIF}	I_{OUT}=1mA, $\triangle V_{OUT}$=2%		25	55	mV
Static Power	I_{SS}	V_{IN}=7.0V		2.5	4.0	μA
Linear Regulation	$\triangle V_{OUT}/V_{OUT}$* $\triangle V_{IN}$	7.0V≤V_{IN}≤30V I_{OUT}=10mA			0.2	%/V

/ Electrical Characteristic Curve

/ The input voltage and output voltage

I_{OUT}=10mA

/ The output voltage and load current

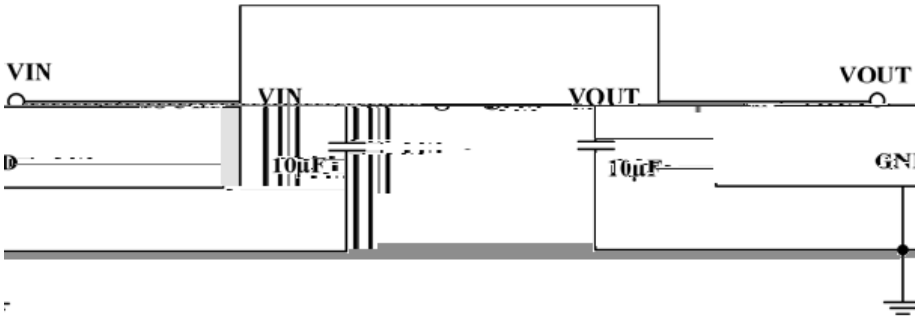


V_{IN}=7.0V

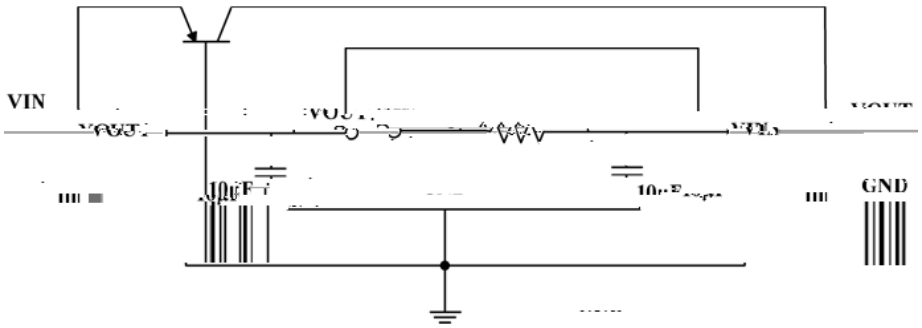
/ The output voltage and temperature

/ Typical Application Circuit

/ Basic Application



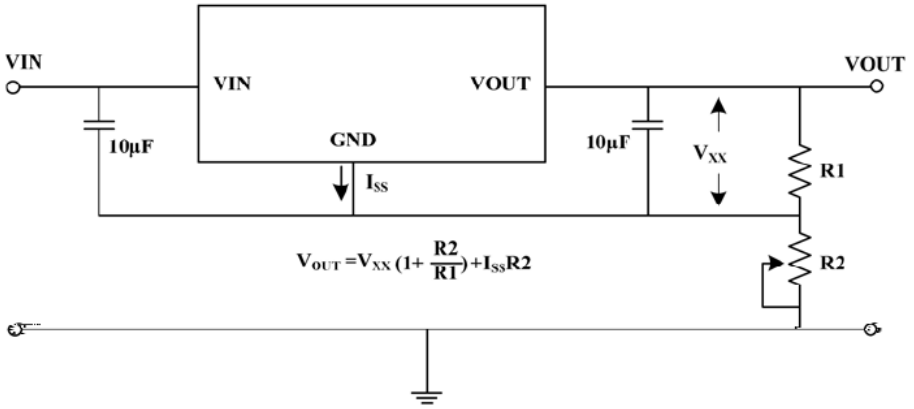
/ High Output Current Voltage Regulator



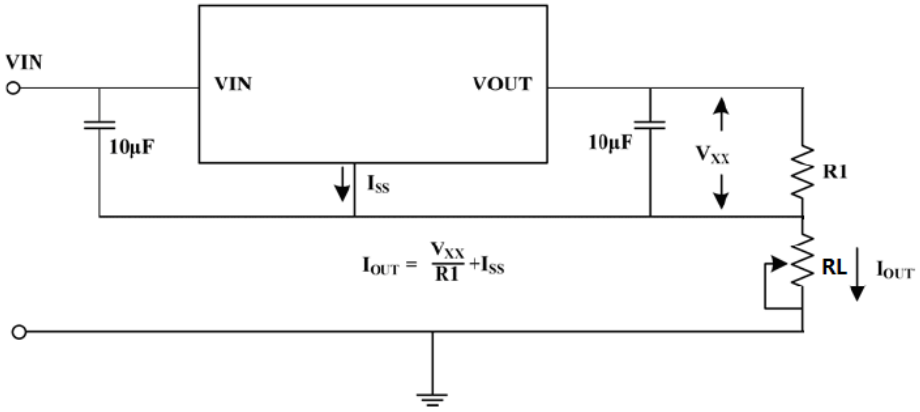
/ Short-Circuit Protection

/ Typical Application Circuit

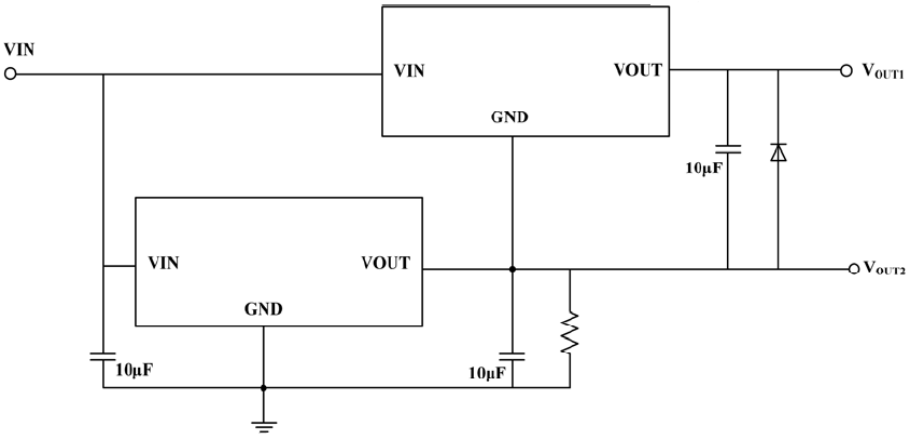
/ Circuit for Increasing Output Voltage



/ Constant Current Regulator

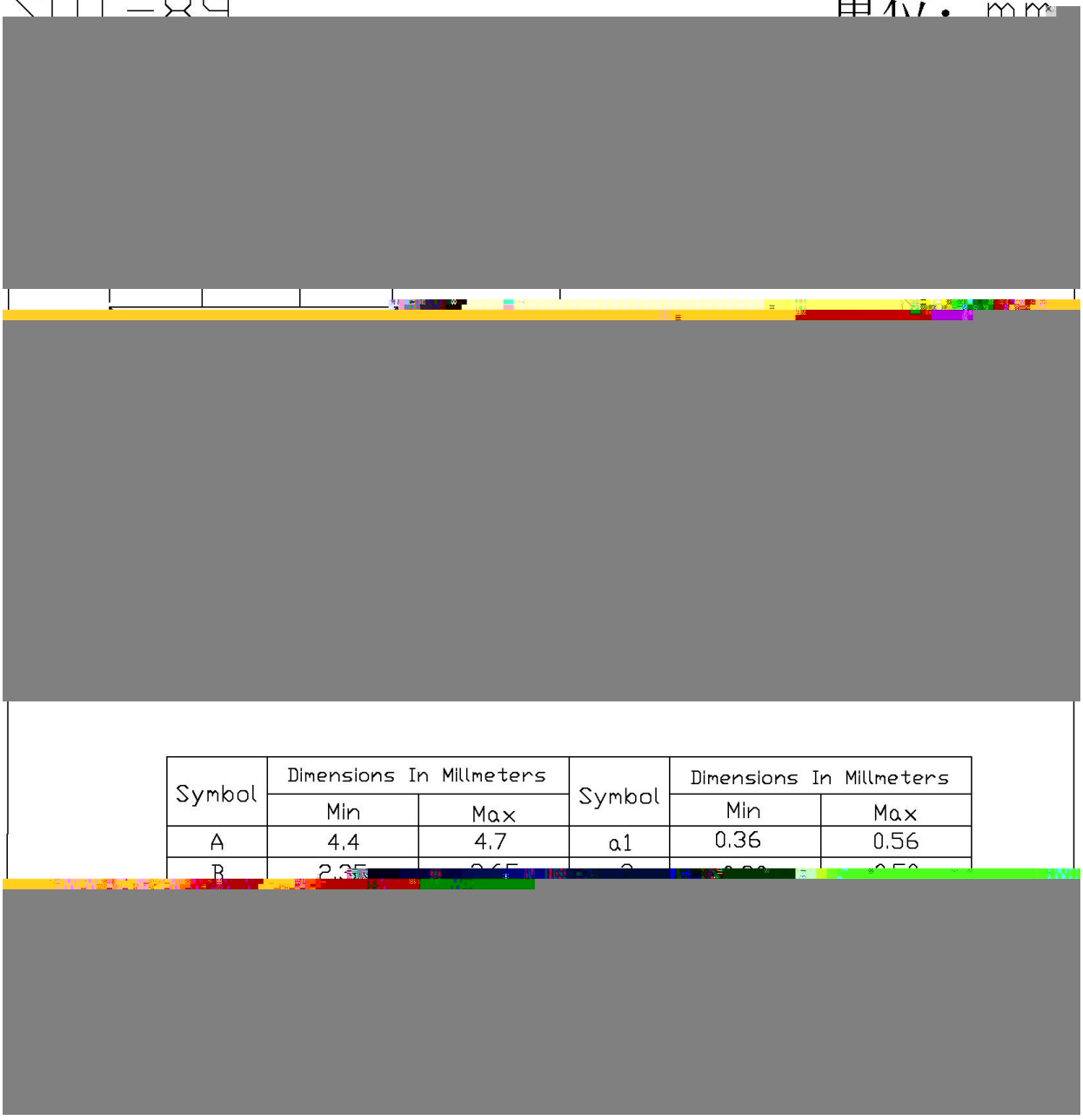


/ Double Output Circuit



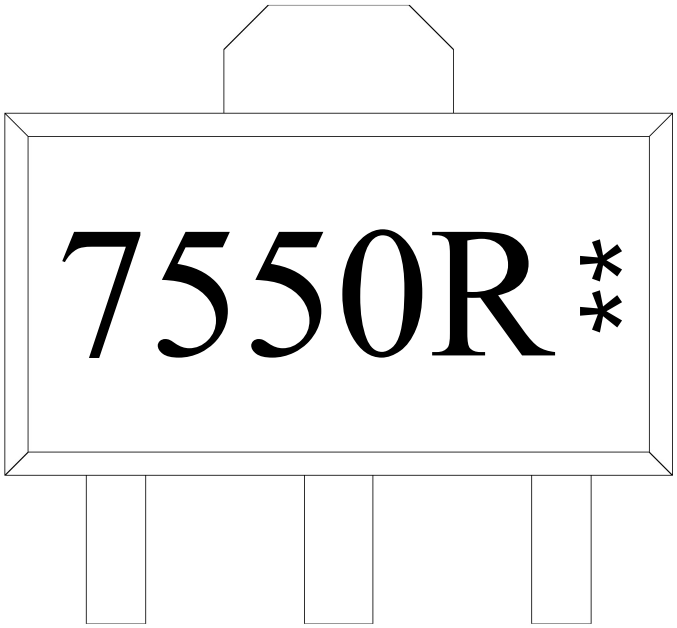
/ Package Dimensions

SOT-89 単位：mm



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
A	4.4	4.7	a1	0.36	0.56
B	2.35				

/ Marking Instructions



7550R

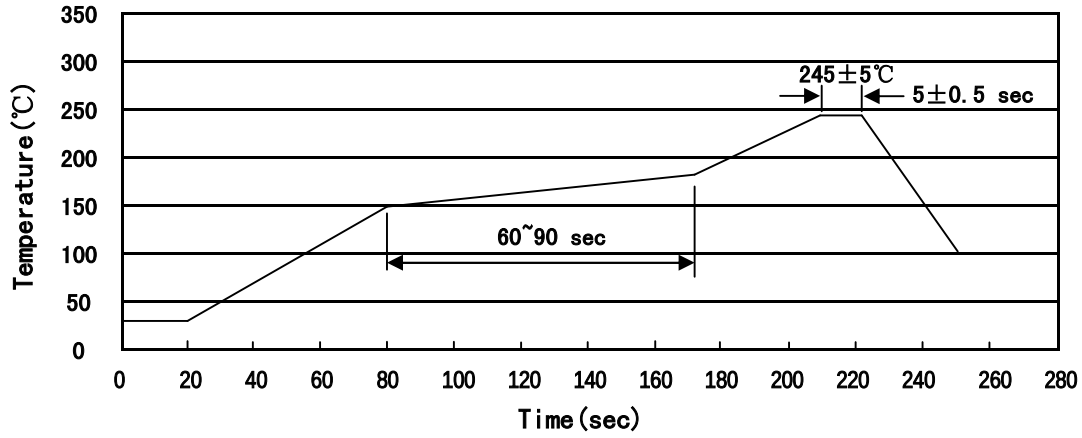
**

Note:

7550R: Product Type

**: 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: mm3)		
	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

/ Notices