/ Descriptions

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

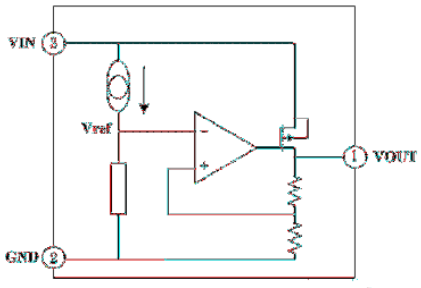
/ Features

Low power consumption,Low voltage drop,Small temperature drift coefficient,High input voltage up to 30V,The static current 2.5 A,The output voltage accuracy: 2%,Qualified to AEC-Q100 Standards for High Reliability, HF Product.

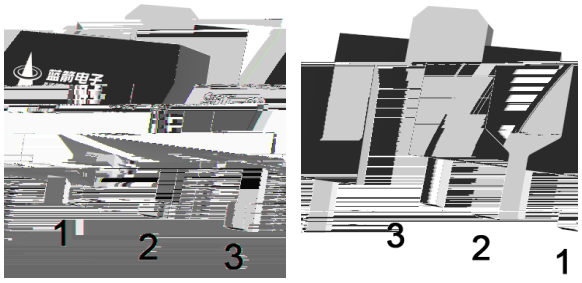
/ Applications

For use in power equipment,Communication equipment,Audio and video equipment, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN1 VOUT PIN 2 GND PIN 3 VIN

/ Marking

See Marking Instructions.

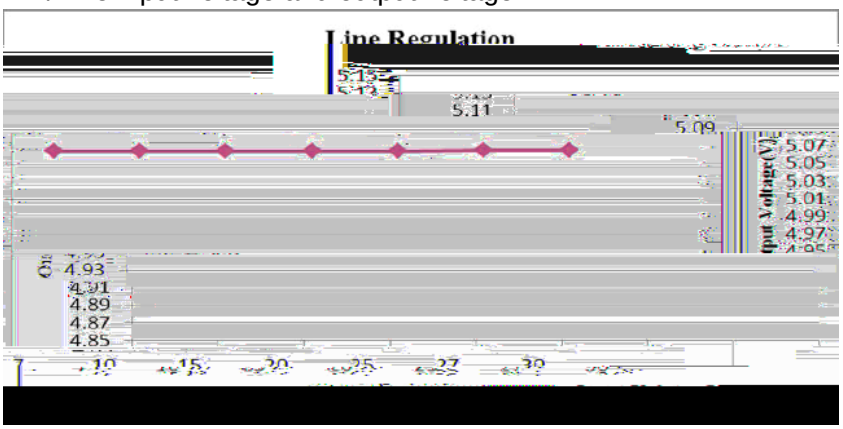
Parameter	Symbol	Rating	Unit
Working Voltage	V_{IN}	-0.3~33	V
Thermal Resistance	$R_{\theta JA}$	200	/W
Power Consumption	P_W	500	mW
Storage Temperature	T_{STG}	-50~+125	
Working Temperature	T_A	-40~+85	

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

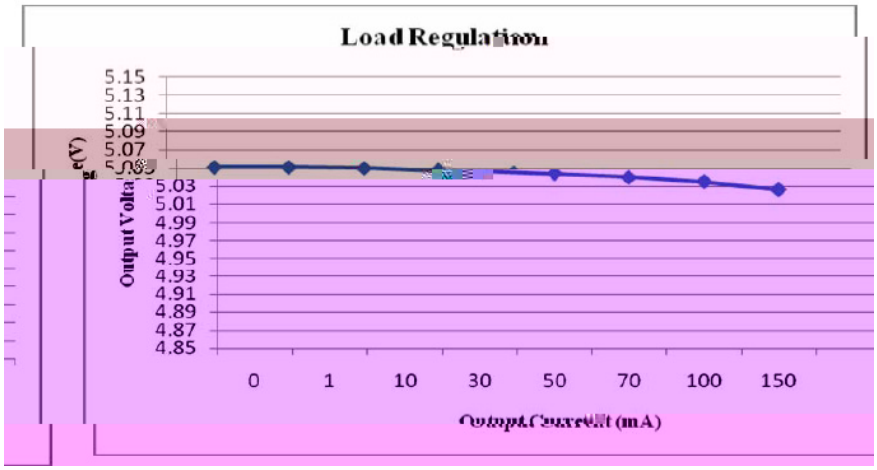
/ Electrical Characteristic Curve

/ The input voltage and output voltage



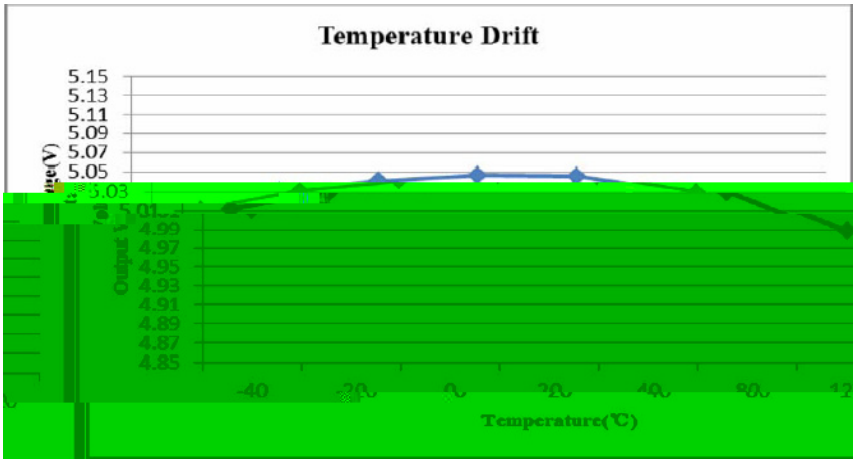
I_{OUT}=10mA

/ The output voltage and load current



V_{IN}=7.0V

/ The output voltage and temperature



V_{IN}=7.0V I_{OUT}=10mA

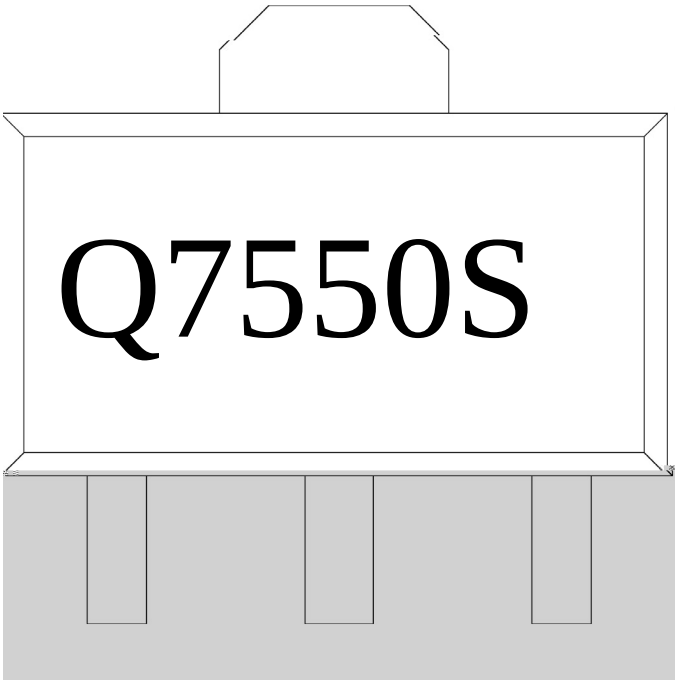
/ Package Dimensions



Symbol	Min	Max
a1	0.36	0.56

Symbol	Min	Max
A	4.4	4.7

/ Marking Instructions



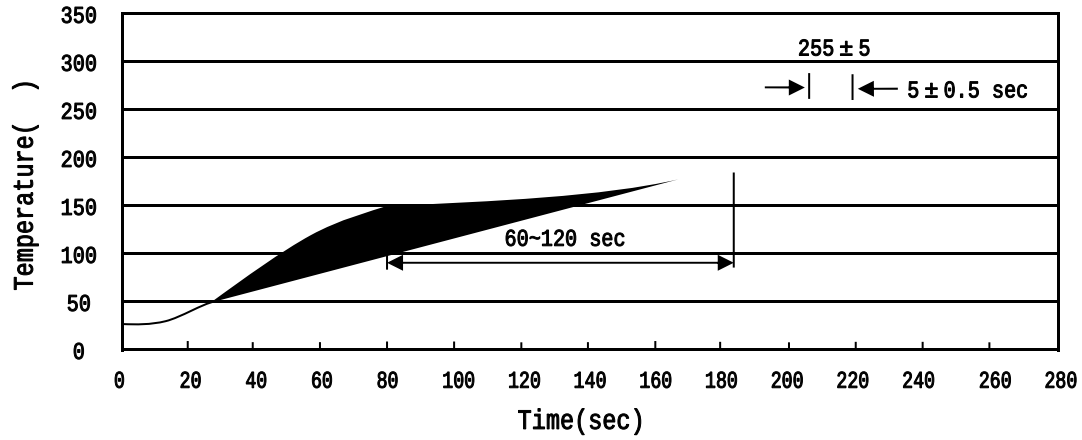
Q

7550S

Note:

Q:	Automobile halogen-free product Code
7550S:	Product Type
**:	Lot No. Code, code change with Lot No

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



Note:

1	150 200 60 120sec;	1.Preheating:150~200 , Time:60~120sec.
2	255 5 5 0.5sec;	2.Peak Temp.:255 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)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	6	42,000	7 ×12	180×120×180	390×385×205

/ Notices