

## / Descriptions

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

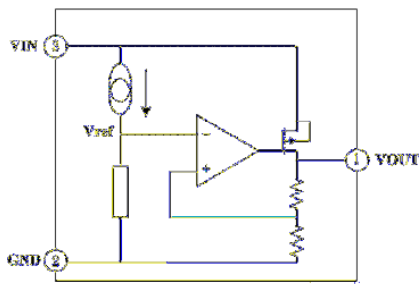
## / Features

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.

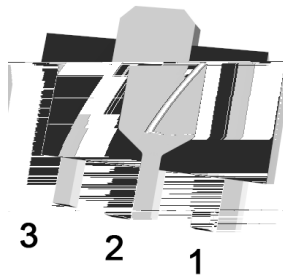
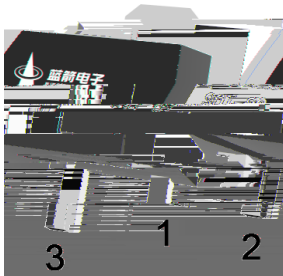
## / Applications

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.

# BRC07550STAQ

Rev.A Jul.-2022

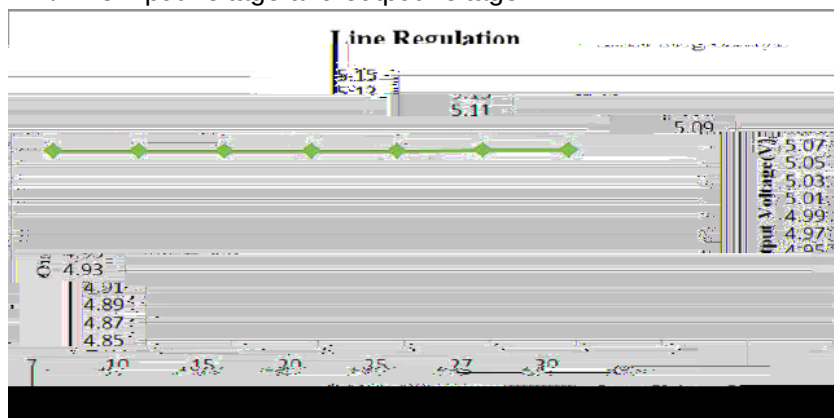
| Parameter           | Symbol          | Rating   | Unit |
|---------------------|-----------------|----------|------|
| Working Voltage     | $V_{IN}$        | -0.3~33  | V    |
| Thermal Resistance  | $R_{\theta JA}$ | 200      | /W   |
| Power Consumption   | $P_W$           | 500      | mW   |
| 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 |
|-----------|--------|-----------------|-----|-----|-----|------|
|-----------|--------|-----------------|-----|-----|-----|------|

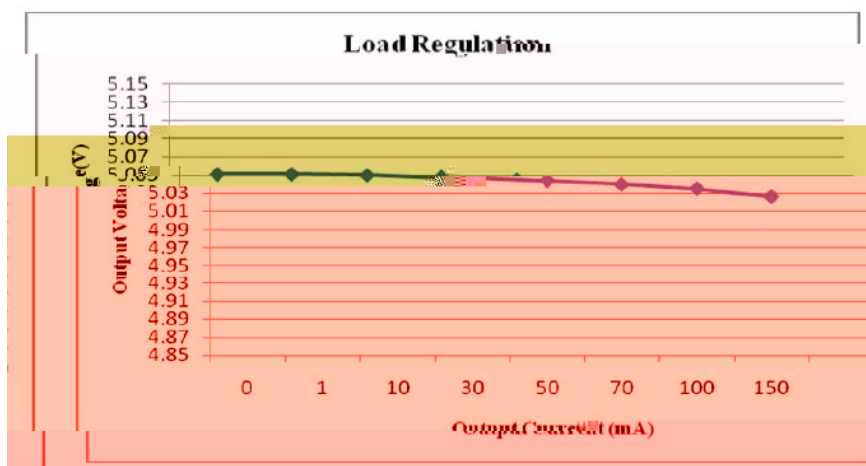
## / Electrical Characteristic Curve

/ The input voltage and output voltage



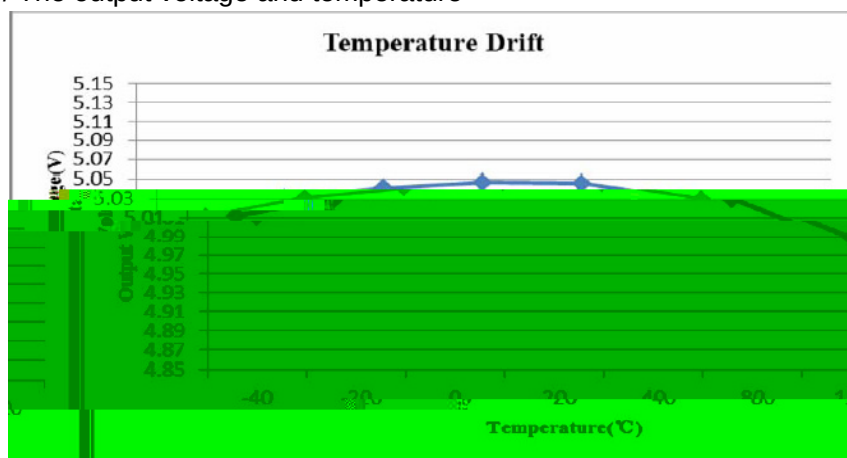
$I_{OUT}=10mA$

/ The output voltage and load current



$V_{IN}=7.0V$

/ The output voltage and temperature



$V_{IN}=7.0V$

$I_{OUT}=10mA$





# BRC07550STAQ

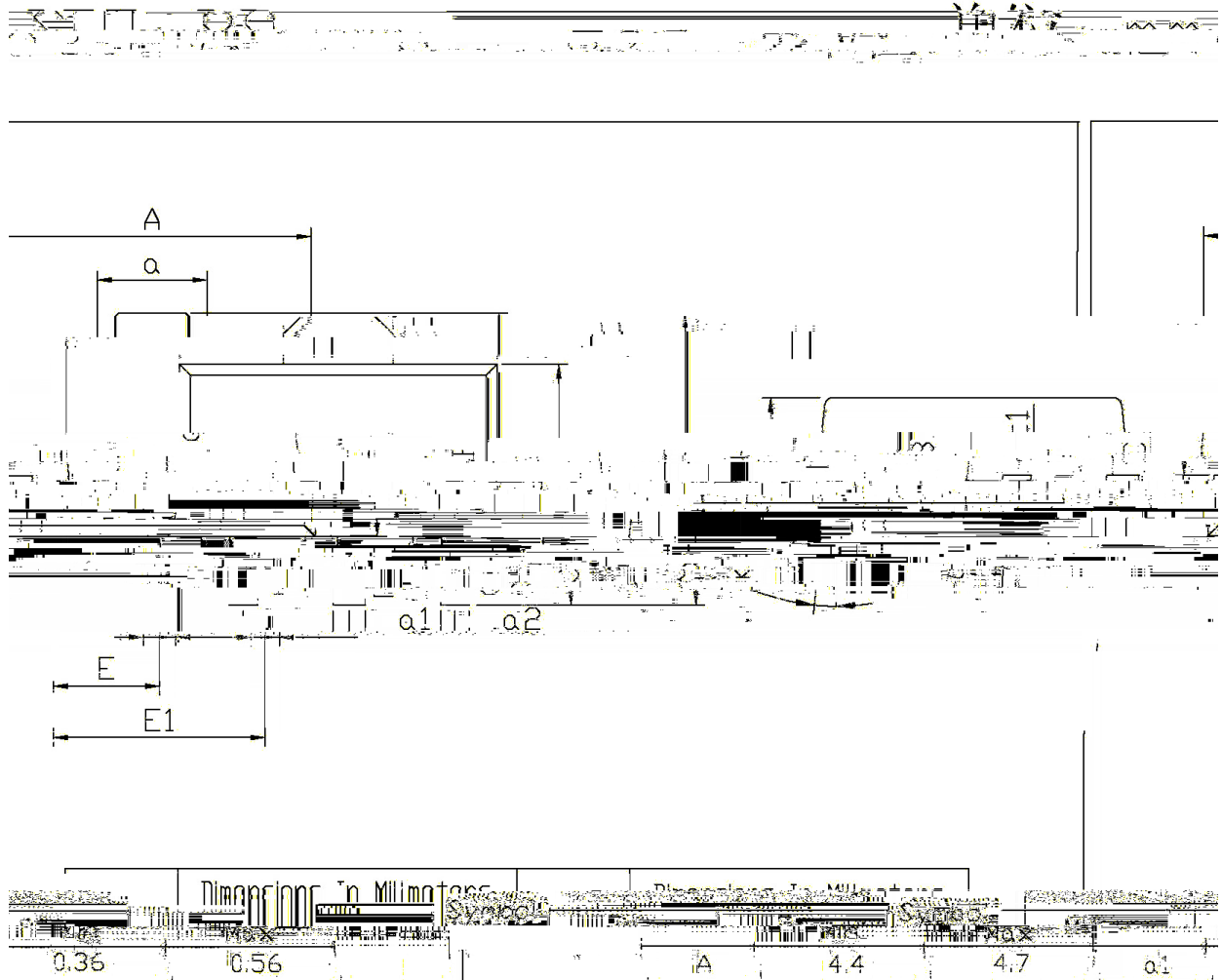
Rev.A Jul.-2022



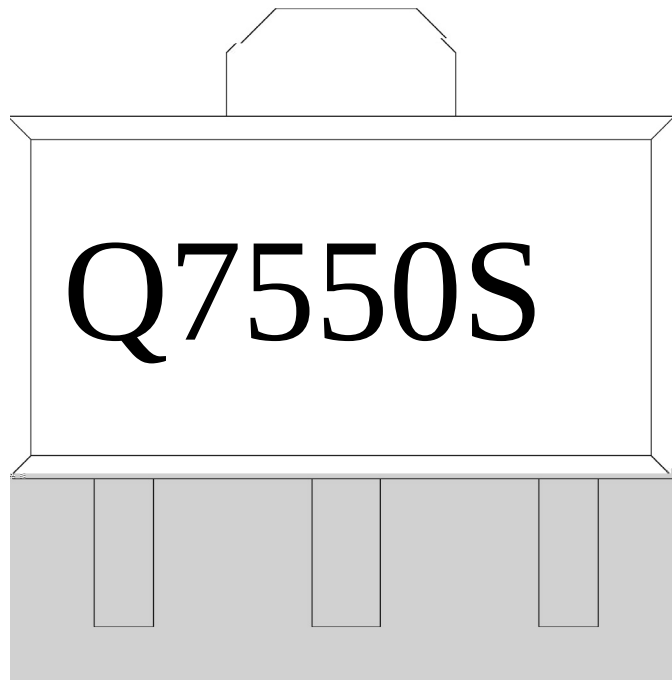
蓝箭电子  
BLUE ROCKET ELECTRONICS

DATA SHEET

## / Package Dimensions



**/ Marking Instructions**



Q

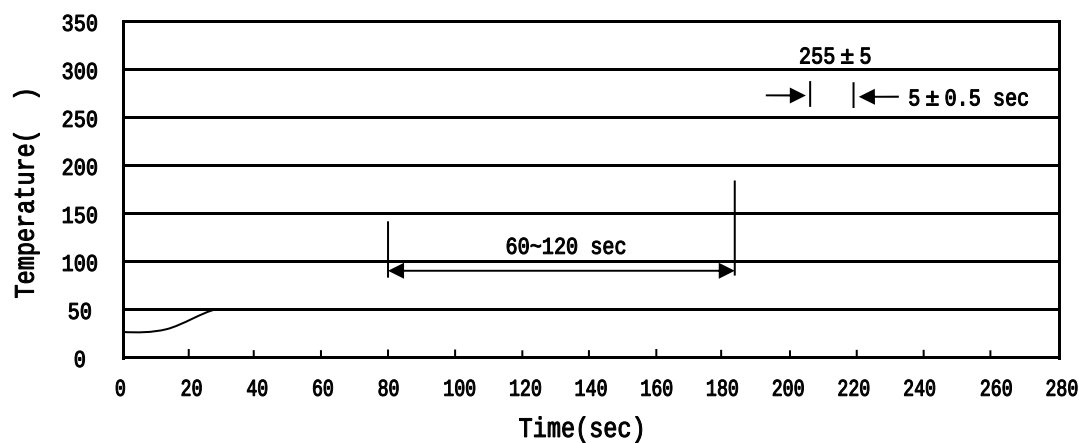
7550S

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 mm) |             |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|---------------------|-------------|-------------|
|              | Units/Reel<br>/ | Reels/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Reel                | Inner Box   | Outer Box   |
| SOT-89       | 1,000           | 7                    | 7,000                | 6                          | 42,000               | 7 ×12               | 180×120×180 | 390×385×205 |

**/ Notices**