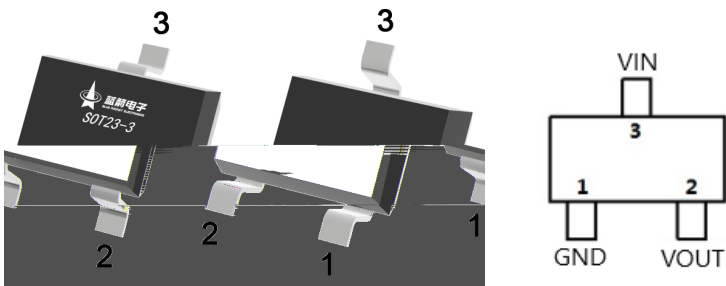
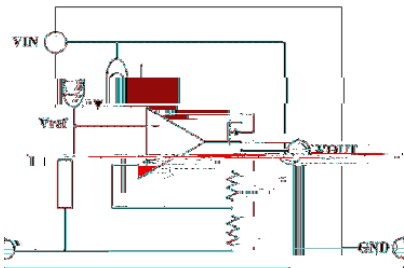


SOT23-3

Low dropout linear regulator in a SOT23-3 Plastic Package.

2uA  
200mA  
450mV@100mA(V<sub>OUT</sub>=3.3V)  
±2%  
70dB@1kHz  
90uV<sub>RMS</sub> 10Hz~100kHz

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



|   |      |  |   |     |  |
|---|------|--|---|-----|--|
|   |      |  |   |     |  |
| 1 | GND  |  | 3 | VIN |  |
| 2 | VOUT |  |   |     |  |

See Marking Instructions.

|     |            |             |    |
|-----|------------|-------------|----|
|     |            |             |    |
|     | $V_{IN}$   | -0.3 to 40  | V  |
|     | $I_{OUT}$  | 200         | 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  |

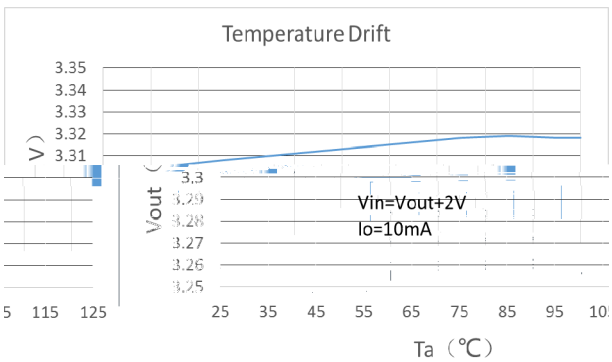
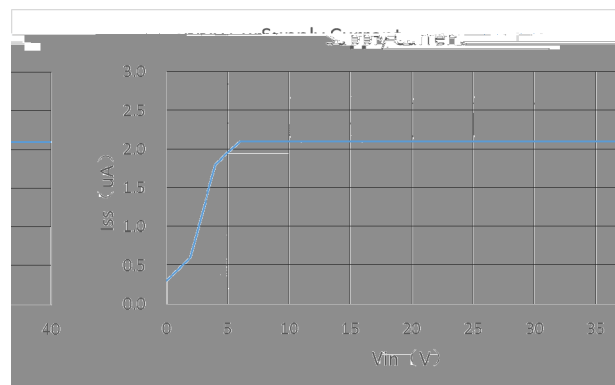
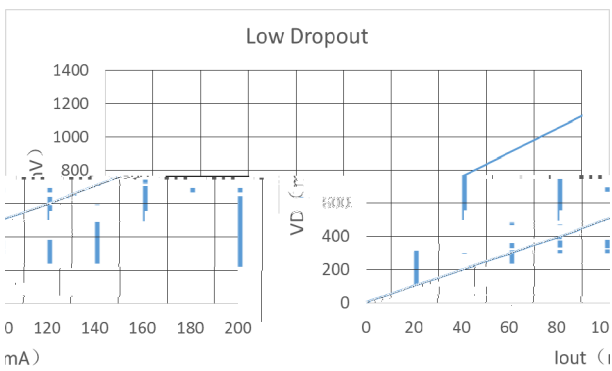
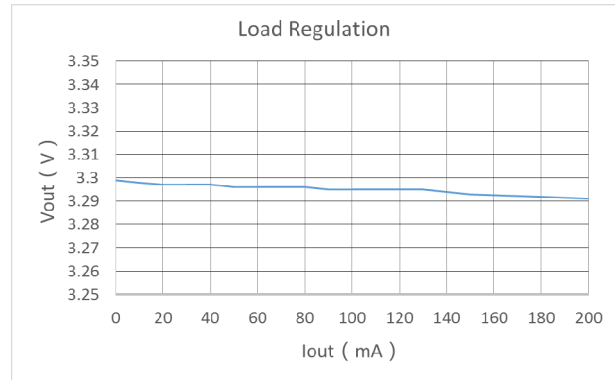
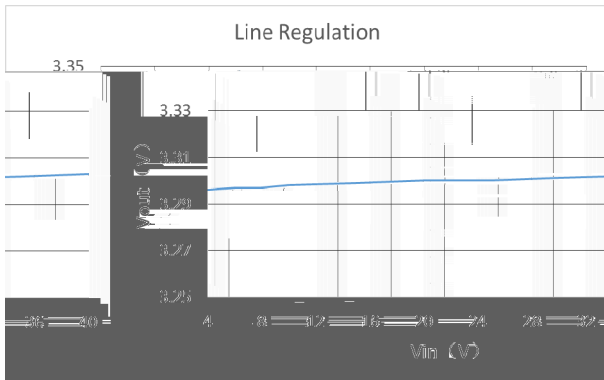
Notes: If the device operating conditions over the maximum rating of the above-mentioned conditions, may cause permanent damage to the device. The above parameters is only part of the operating conditions the maximum, we do not recommend the device running outside the scope of this specification. If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

|   |              |                                   |       |     |       |   |
|---|--------------|-----------------------------------|-------|-----|-------|---|
|   |              |                                   |       |     |       |   |
|   | $V_{IN}$     |                                   |       |     | 36    | V |
| 1 | $V_{OUT\ E}$ | $I_{OUT}=10mA$                    | 3.234 | 3.3 | 3.366 | V |
| 2 | $V_{dif}$    | $I_{OUT}=100mA$<br>$V_{OUT}=3.3V$ |       |     |       |   |

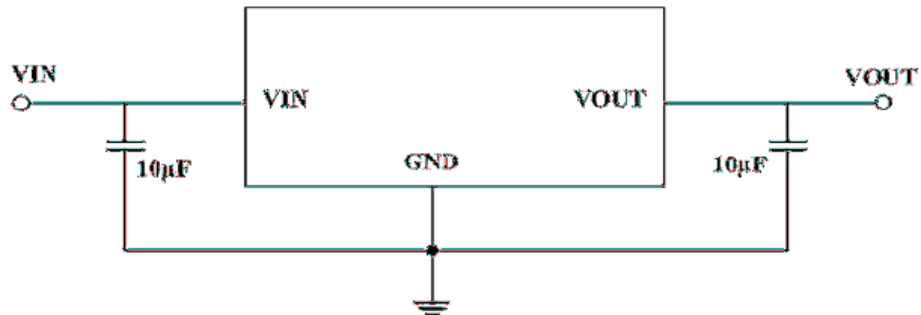
,ON

|  |                 |                                  |  |    |  |                   |
|--|-----------------|----------------------------------|--|----|--|-------------------|
|  |                 |                                  |  |    |  |                   |
|  | PSRR            | I <sub>OUT</sub> =50mA, f=100Hz  |  | 80 |  | dB                |
|  |                 | I <sub>OUT</sub> =50mA, f=1kHz   |  | 70 |  |                   |
|  |                 | I <sub>OUT</sub> =50mA, f=10kHz  |  | 60 |  |                   |
|  |                 | I <sub>OUT</sub> =50mA, f=100kHz |  | 50 |  |                   |
|  | V <sub>ON</sub> | BW=10Hz to 100kHz                |  | 90 |  | uV <sub>RMS</sub> |

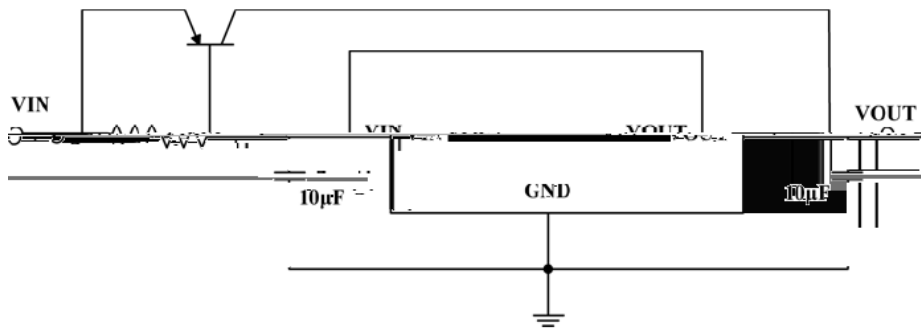
- (1)  $V_{OUT\_E}$   $V_{OUT\_S}$
- (2)  $V_{OUT}$   $V_{OUT} \times 98\%$



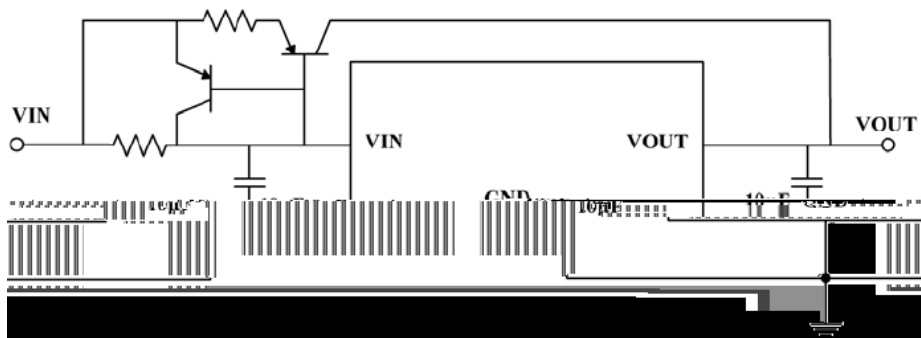
## / Basic Application



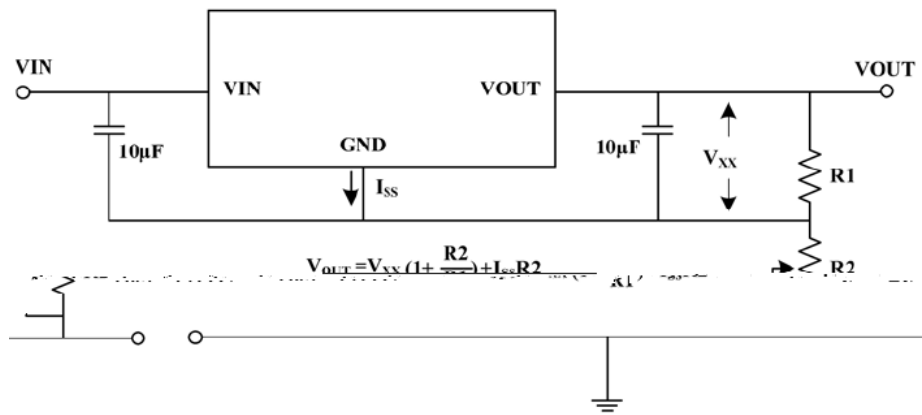
## / High Output Current Voltage Regulator



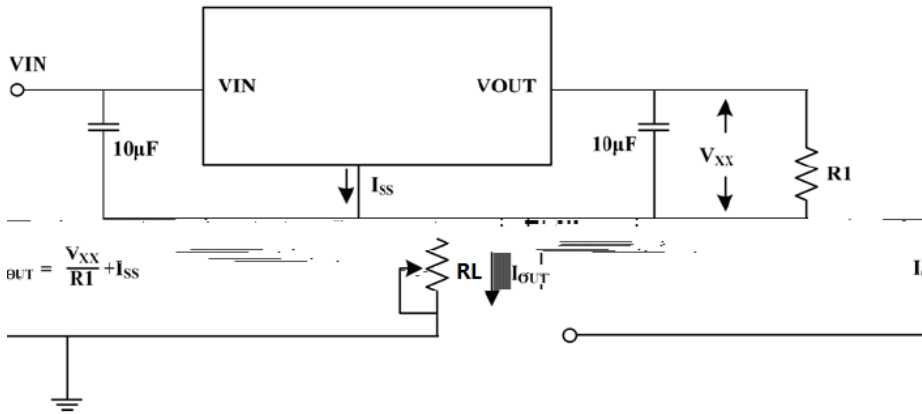
## / Short-Circuit Protection



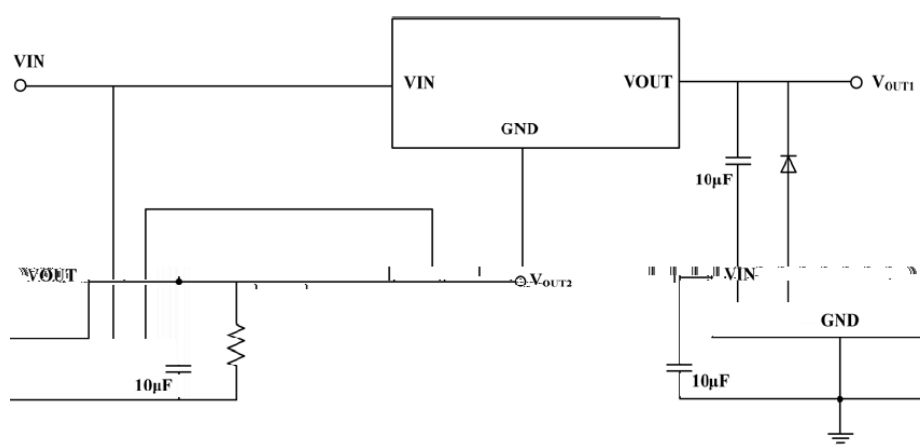
/ Circuit for Increasing Output Voltage

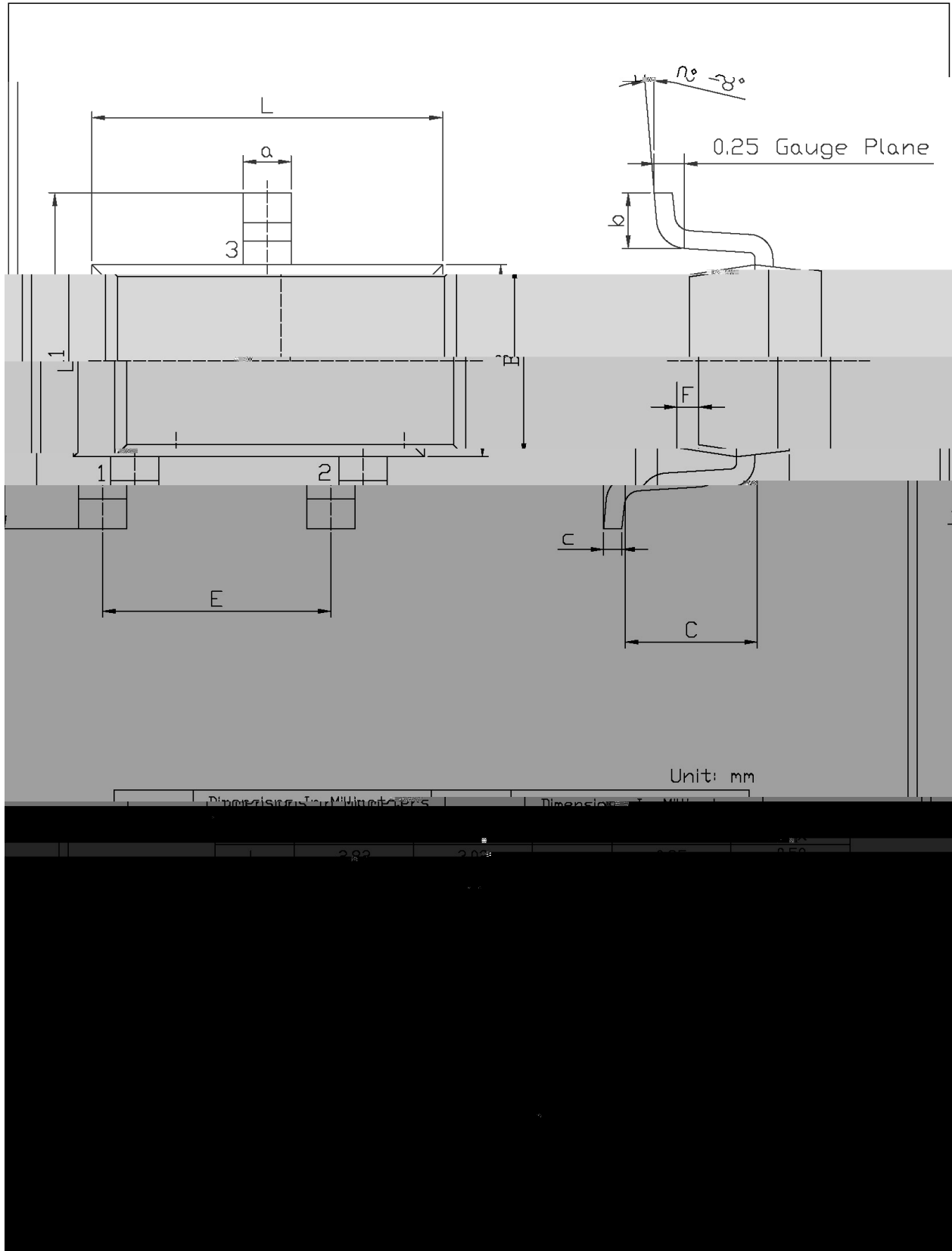


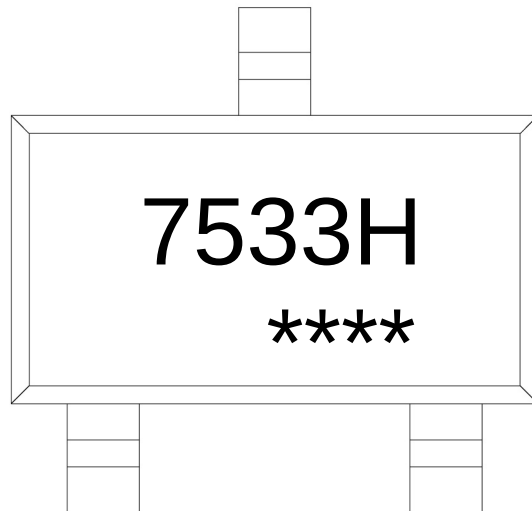
/ Constant Current Regulator



/ Double Output Circuit







7533H

\*\*\*\*

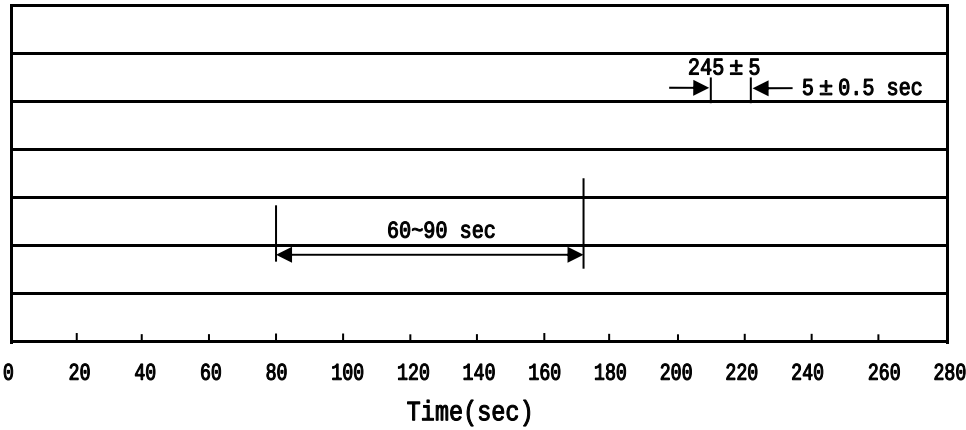
Note:

7533H: 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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

| Package Type | Units      |                 |                 |                       |                 | Dimension (unit mm <sup>3</sup> ) |             |             |
|--------------|------------|-----------------|-----------------|-----------------------|-----------------|-----------------------------------|-------------|-------------|
|              | Units/Reel | Reels/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Reel                              | Inner Box   | Outer Box   |
| SOT23-3      | 3,000      | 10              | 30,000          | 4                     | 120,000         | 7" ×8                             | 210×205×205 | 445×435×230 |