HFZT

# 7908

## Three-terminal positive voltage regulator

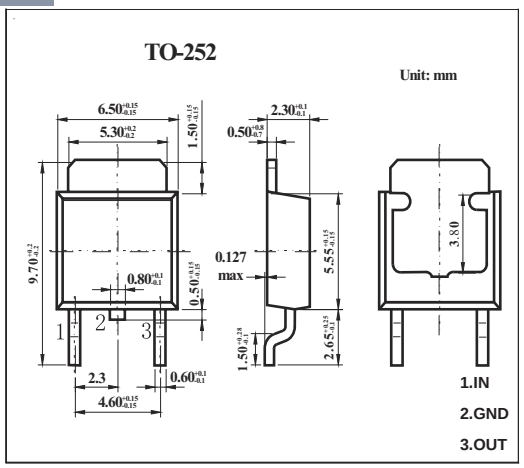
### FEATURES

- Maximum output current IOM: 1.5 A
- Output voltageVO: -8V
- Continuous total dissipation

PD: 1.25 W ( T a= 25 ℃ )

### MECHANICAL DATA

- Case: TO-252 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any




## ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherw ise specified)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Input Voltage | $V_i$ | -35 | V |
| Thermal Resistance from Junction to Air | $R_{\theta JA}$ | 100 | ℃/W |
| Operating Junction Temperature Range | $T_{OPR}$ | 0~+150 | ℃ |
| Storage Temperature Range | $T_{STG}$ | -65~+150 | ℃ |

## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE(Vi=-14V,Io=500mA,Ci=2.2μF, Co=1μF, unless otherwise specified)

| Parameter | Symbol | Test conditions | | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| Output Voltage | Vo | | 25℃ | -7.68 | -8 | -8.32 | V |
| | | -10.5V≤Vi≤-23V,Io=5mA-1A | 0-125℃ | -7.6 | -8 | -8.4 | V |
| Load Regulation | ΔVo | Io=5mA-1.5A | 25℃ | | 15 | 160 | mV |
| | | Io=250mA-750mA | 25℃ | | 5 | 80 | mV |
| Line Regulation | ΔVo | -10.5V≤Vi≤-25V | 25℃ | | 12.5 | 160 | mV |
| | | -11V≤Vi≤-17V | 25℃ | | 4 | 80 | mV |
| Quiescent Current | Iq | | 25℃ | | 1.5 | 2 | mA |
| Quiescent Current Change | ΔIq | -10.5V≤Vi≤-25V | 0-125℃ | | | 1 | mA |
| | ΔIq | 5mA≤$I_O$≤1A | 0-125℃ | | | 0.5 | mA |
| Output Noise Voltage | $V_N$ | 10Hz≤f≤100KHz | 25℃ | | 200 | | μV/Vo |
| Output Voltage drift | △Vo/△T | $I_O$=5mA | 0-125℃ | | -0.6 | | mV/℃ |
| Ripple Rejection | RR | -11.5V≤Vi≤-21.5V,f=120Hz | 0-125℃ | 54 | 60 | | dB |
| Dropout Voltage | Vd | Io=1A | 25℃ | | 1.1 | | V |
| Peak Current | Ipk | | 25℃ | | 2.1 | | A |

* Pulse test.

### TYPICAL APPLICATION