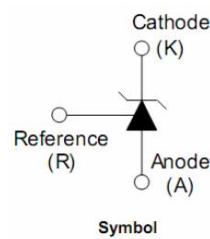
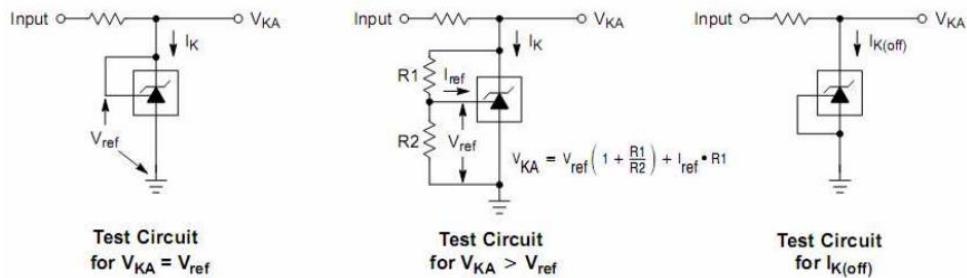
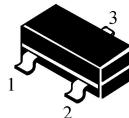


SOT-23 Low Voltage Three Terminal Adjustable Regulator 低压三端可调稳压IC

■ Features 特点

SOT-23

1. Reference
2. Cathode
3. Anode



■ Absolute Maximum Ratings 最大额定值

($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

| Characteristic 特性参数 | Symbol 符号 | Rating 额定值 | Unit 单位 |
|--|-----------------|-------------|---------------------------|
| Cathode to Anode Voltage 阴极到阳极电压 | V_{KA} | 20 | V |
| Cathode Current Range 工作电流 | I_K | 100 | mA |
| Reference Input Current Range 输入电流 | I_{REF} | 3 | mA |
| Power dissipation 耗散功率 | P_D | 200 | mW |
| Thermal Resistance Junction-Ambient 热阻 | $R_{\Theta JA}$ | 625 | $^\circ\text{C}/\text{W}$ |
| Solder Temperature 焊接温度/时间 | T_d | 260/10 | $^\circ\text{C}/\text{s}$ |
| Operating Ambient Temperature 工作温度 | T_{op} | 0~70 | $^\circ\text{C}$ |
| Junction and Storage Temperature 结温和储藏温度 | T_J, T_{stg} | -40 to +125 | $^\circ\text{C}$ |

■ Device Marking 产品打标

FS432M=432



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

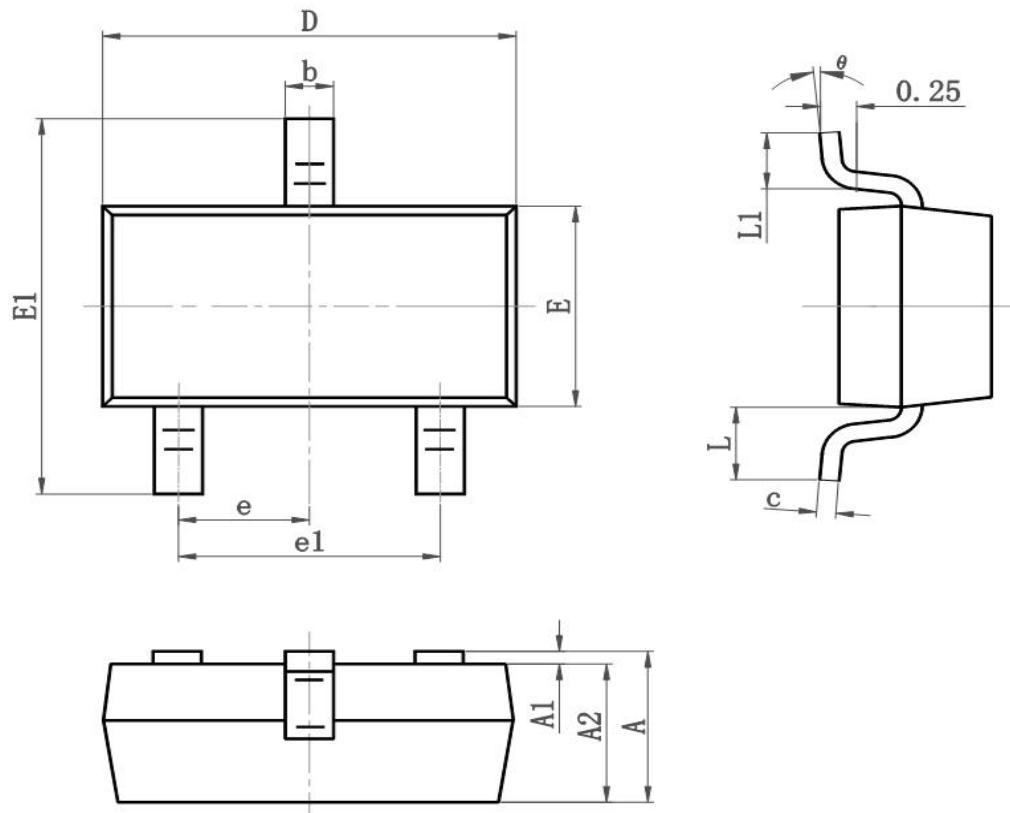
FS432M

■ Electrical Characteristics 电特性

($V_{KA}=V_{REF}$ $I_{KA}=10mA$ $T_a=25^\circ C$ unless otherwise noted 如无特殊说明)

| Characteristic 特性参数 | | Symbol 符号 | Test Condition 测试条件 | Min 最小值 | Type 典型值 | Max 最大值 | Unit 单位 |
|---|------|--------------------------------|---|------------|-------------|------------|------------|
| Reference Input Voltage 基准电压 | 0.5% | V_{REF} | $V_{KA}=V_{REF}$ $I_{KA}=10mA$ | 1.234 | 1.24 | 1.247 | V |
| | 1% | | | 1.228 | 1.24 | 1.252 | |
| Deviation of reference Input Voltage Over temperature 标准温度内基准电压偏差 | | $\Delta V_{REF}/\Delta T$ | $V_{KA}=V_{REF}$ $I_{KA}=10mA$ $0 \sim 70^\circ C$ | | 10 | 25 | mV |
| Ratio of Change in Reference Input Voltage Change in Cathode Voltage 阴极电压与基准电压变化比 | | $\Delta V_{REF}/\Delta V_{KA}$ | $I_{KA}=10mA$ $\Delta V_{KA}=18V \sim V_{REF}$ | | -1 | -2.7 | mV/V |
| Reference Input Current 基准电流 | | I_{REF} | $I_{KA}=10mA$ $R1=10k\Omega, R2=\infty$ | | 0.25 | 0.5 | μA |
| Deviation of Reference Input Current Over Full Temperature Range 标准温度内基准电流偏差 | | $\Delta I_{REF}/\Delta T$ | $I_{KA}=10mA$ $R1=10k\Omega, R2=\infty$ $T_a=0 \sim 70^\circ C$ | | 0.05 | 0.3 | μA |
| Minimum Cathode Current for Regulation 最小阴极电流 | | $I_{KA}(\text{MIN})$ | $V_{KA}=V_{REF}$ | | 60 | 80 | mA |
| Off-state Cathode Current 关闭状态阴极电流 | | $I_{KA}(\text{OFF})$ | $V_{KA}=18V$ $V_{REF}=0V$ | | 0.04 | 0.5 | μA |
| Dynamic Impedance 输出阻抗 | | Z_{KA} | $V_{KA}=V_{REF}$ $I_{KA}=1 \sim 100mA$ $f \leq 1kHz$ | | 0.2 | 0.4 | Ω |

■SOT-23 Dimension 外形封装尺寸



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.050 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950TYP | | 0.037TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550REF | | 0.022REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |