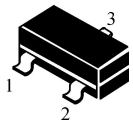
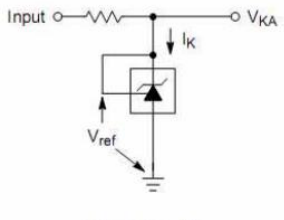
SOT-23 Low Voltage Three Terminal Adjustable Regulator
低压三端可调稳压 IC

SOT—23

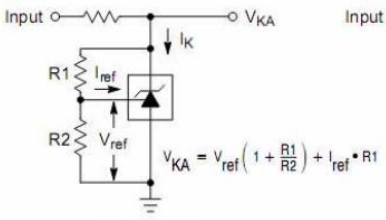
1. Reference
2. Cathode
3. Anode



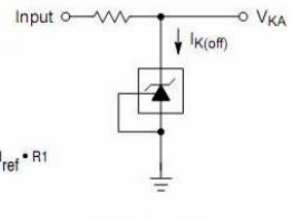
■Features 特点



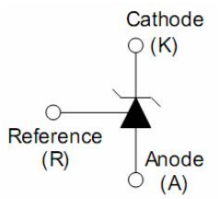
Test Circuit for $V_{KA} = V_{ref}$



Test Circuit for $V_{KA} > V_{ref}$



Test Circuit for $I_{K(off)}$



Symbol

■Absolute Maximum Ratings 最大额定值

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

Characteristic 特性参数	Symbol 符号	Rat 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	℃/W
Solder Temperature 焊接温度/时间	Td	260/10	℃/S
Operating Ambient Temperature 工作温度	T_{op}	0~70	℃
Junction and Storage Temperature 结温和储藏温度	T_J,T_{stg}	-40to+125℃	

■Device Marking 产品打标

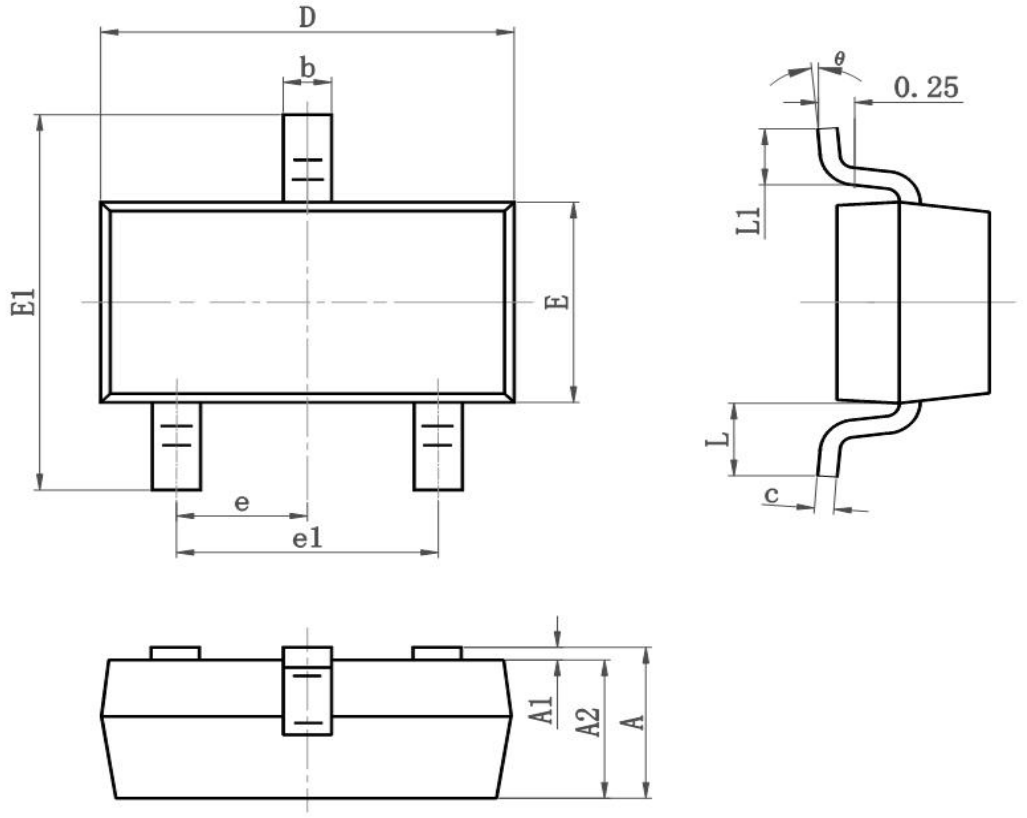
FS432M=432

■Electrical Characteristics 电特性

(V_{KA}=V_{REF} I_{KA}=10mA T_a=25℃ 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 ~ 70℃		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 ΔV_{KA}=18V~V_{REF}		-1	-2.7	mV/V
Reference Input Current 基准电流		I_{REF}	I_{KA}=10mA R1=10kΩ,R2=∞		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=10kΩ,R2=∞ T_A=0~70℃		0.05	0.3	μA
Minimum Cathode Current for Regulation 最小阴极电流		I_{KA}(MIN)	V_{KA}=V_{REF}		60	80	mA
Off-state Cathode Current 关闭状态阴极电流		I_{KA}(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 ~ 100mA f≤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	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°