



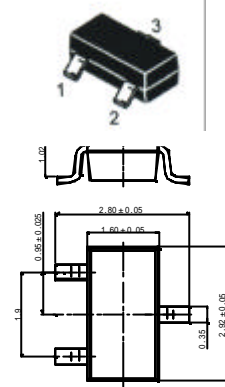
AV431 Adjustable Accurate Reference Source

FEATURES

- The output voltage can be adjusted to 36V
- Low dynamic output impedance ,its typical value is 0.2
- Trapping current capability is 1 to 100mA
- The typical value of the equivalent temperature factor in the whole temperature scope is 50 ppm/
- The effective temperature compensation in the working range of full temperature
- Low output noise voltage
- Fast on -state response

SOT-23-3L

1. REFERENCE
2. CATHODE
3. ANODE



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

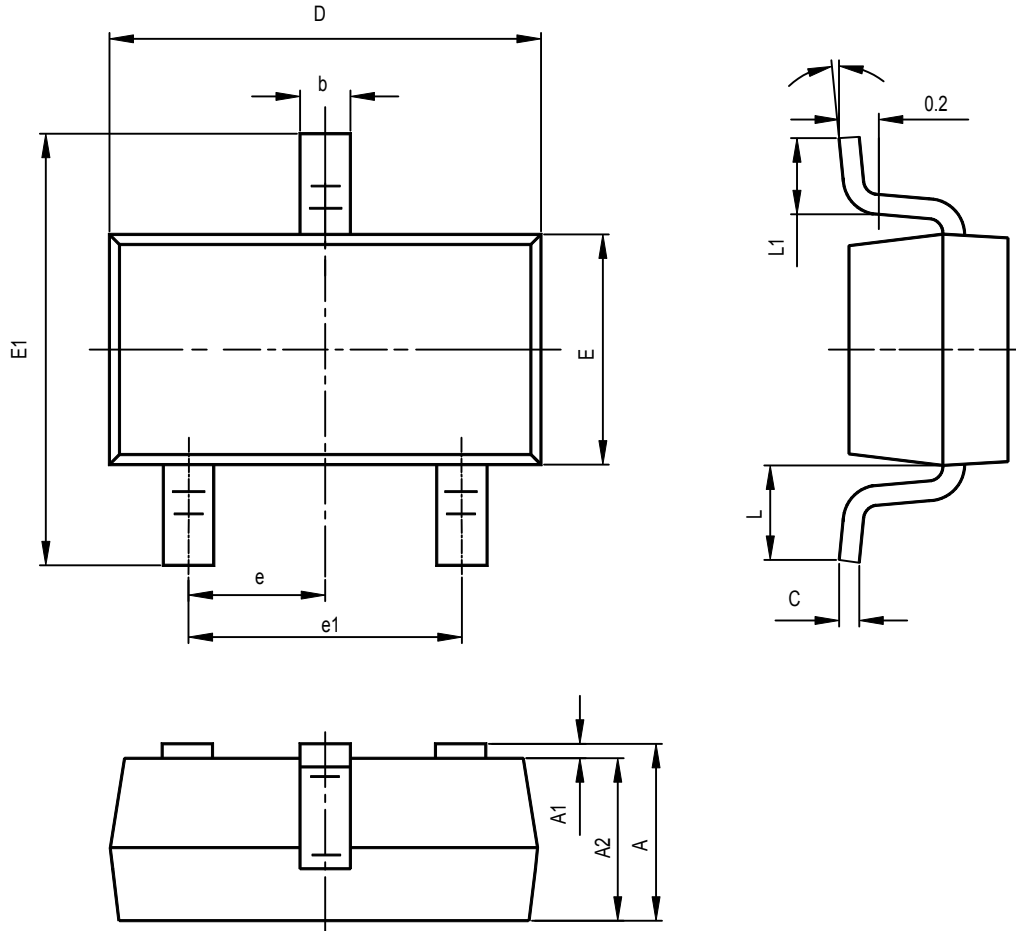
Parameter	SYMBOL	VALUE	UNITS
Cathode Voltage	V_{KA}	37	V
Cathode Current Range(Continuous)	I_{KA}	-100~+150	mA
Reference Input Current Range	I_{ref}	0.05~+10	mA
Power Dissipation	P_D	350	mW
Operating temperature	T_{opr}	0~70	
Storage temperature Range	T_{stg}	-55~+150	

ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Reference Input Voltage	V_{ref}	$V_{KA}=V_{REF}, I_{KA}=10mA$	2.440	2.495	2.550	V
Deviation of reference input Voltage Over temperature (note)	V_{ref}/T	$V_{KA}=V_{REF}, I_{KA}=10mA$ $T_{min} \quad T_a \quad T_{max}$		4.5	17	mV
Ratio Of Change in Reference Input Voltage to the change in Cathode Voltage	V_{ref}/V_{KA}	$I_{KA}=10mA$	$V_{KA}=10V \sim V_{REF}$	-1.0	-2.7	m V/V
			$V_{KA}=36V \sim 10V$	-0.5	-2.0	
Reference Input Current	I_{ref}	$I_{KA}=10mA, R_1=10K, R_2=$		1.5	0.5	μA
Deviation Of Reference Input Current Over Full Temperature Range	I_{ref}/T	$I_{KA}=10mA, R_1=10K, R_2=$ $T_A=full \text{ Temperature}$		0.4	1.2	μA
Minimum cathode current for Regulation	$I_{KA}(min)$	$V_{KA}=V_{REF}$		0.45	1.0	mA
Off-state cathode Current	$I_{KA}(OFF)$	$V_{KA}=36V, V_{REF}=0$		0.05	1.0	μA
Dynamic Impedance	Z_{KA}	$V_{KA}=V_{REF}, I_{KA}=1 \text{ to } 100mA$ $f = 1.0KHZ$		0.15	0.5	

Note : $T_{MIN}=0$, $T_{MAX}=+70$

SOT-23-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.400	0.012	0.016
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950TPY		0.037TPY	
e1	1.800	2.000	0.071	0.079
L	0.700REF		0.028REF	
L1	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°