



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-89 Encapsulate Adjustable Reference Source

CJ431 Adjustable Accurate Reference Source

FEATURES

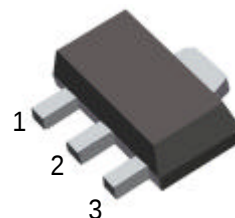
- The output voltage can be adjusted to 36V
- Low dynamic output impedance ,its typical value is 0.2Ω
- Trapping current capability is 1 to 100mA
- The typical value of the equivalent temperature factor in the whole temperature scope is 50 ppm/
- The effective temperature compensation in the working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

SOT-89

1. REFERENCE

2. ANODE

3. CATHODE



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

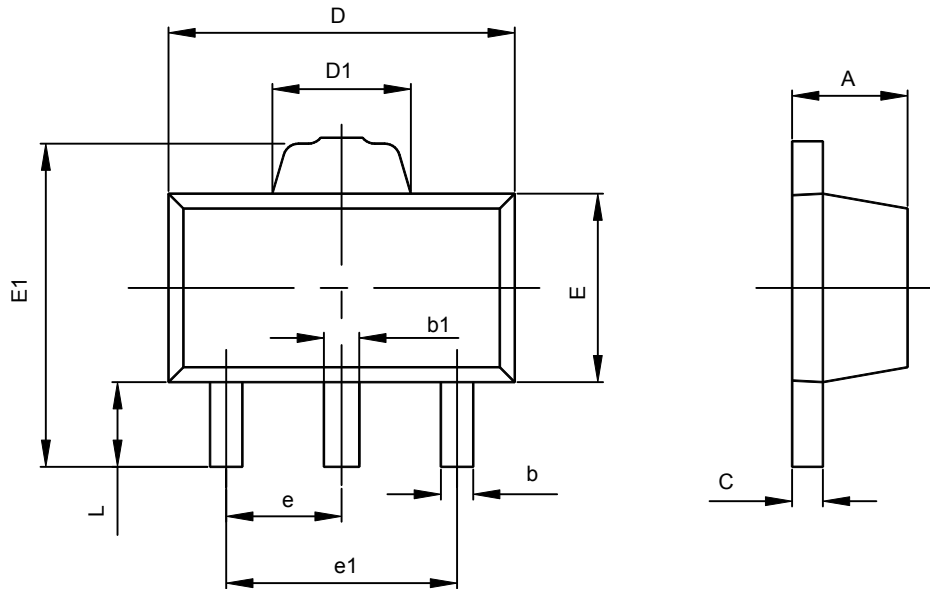
Parameter	SYMBOL	VALUE	UNITS
Cathode Voltage	V_{KA}	37	V
Cathode Current Range (Continuous)	I_{KA}	-100~+150	mA
Reference Input Current Range	I_{ref}	0.05~+10	mA
Power Dissipation	P_D	770	mW
Operating temperature	T_{opr}	0~70	
Storage temperature Range	T_{stg}	-65~+150	

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	$V_{KA}=V_{REF}$, $I_{KA}=10mA$ $T_{min} \leq T_a \leq T_{max}$		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	mV/V
		$V_{KA}=36V \sim 10V$		-0.5	-2.0	
Reference Input Current	I_{ref}	$I_{KA}=10mA$, $R_1=10K\Omega$ $R_2=\infty$		1.5	4	μA
Deviation Of Reference Input Current Over Full Temperature Range	I_{ref}/T	$I_{KA}=10mA$, $R_1=10K\Omega$ $R_2=\infty$ $T_A=\text{full Temperature}$		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}	$V_{KA}=V_{REF}$, $I_{KA}=1$ to 100mA $f \leq 1.0KHz$		0.15	0.5	Ω

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

SOT-89-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.360	0.560	0.014	0.022
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.400	1.800	0.055	0.071
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500TYP		0.060TYP	
e1	2.900	3.100	0.114	0.122
L	0.900	1.100	0.035	0.043