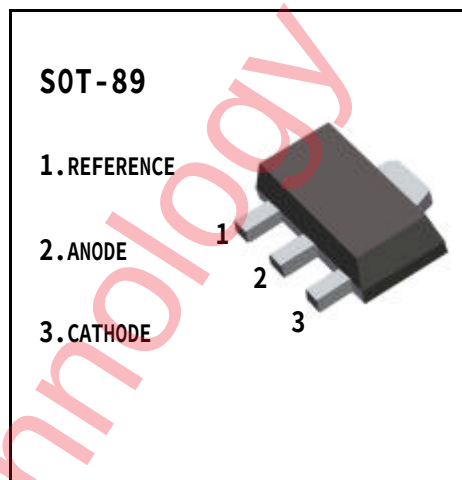


**SOT-89 Encapsulate Adjustable Reference Source****CJ431** Adjustable Accurate Reference Source**FEATURES**

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/°C
The effective temperature compensation in the working range of full temperature
Low output noise voltage
Fast on -state respons

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

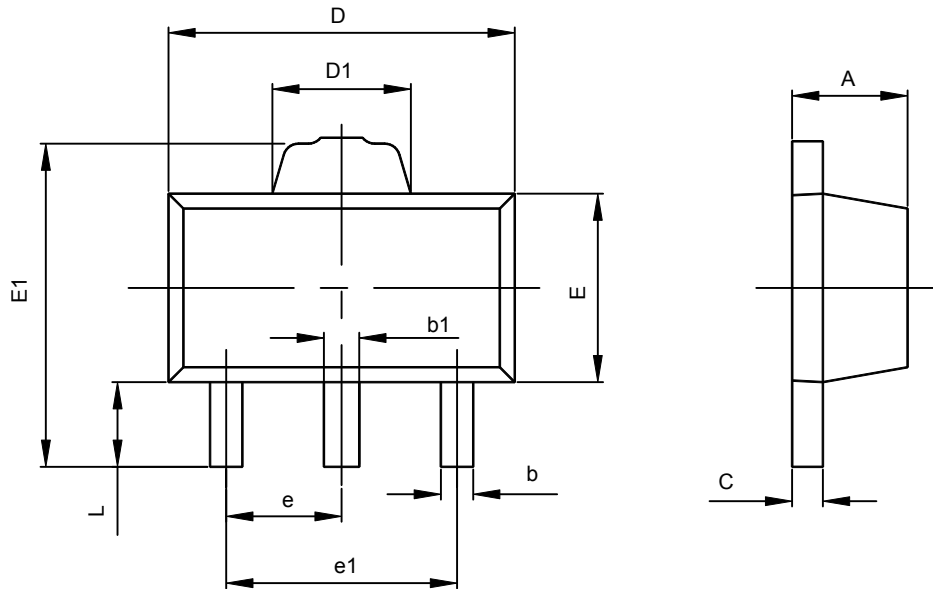
Parameter	SYMBOL	VALUE	UNITS
Cathode Voltage	V_{KA}	37	V
Cathode Current Range (Continuous)	I_{KA}	-100~+150	mA
Reference Input Current Range	I_{ref}	0.05~+10	mA
Power Dissipation	P_D	770	mW
Operating temperature	T_{opr}	0~70	°C
Storage temperature Range	T_{stg}	-65~+150°C	°C

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Reference Input Voltage	V_{ref}	$V_{KA}=V_{REF}$, $I_{KA}=10\text{mA}$	2.440	2.495	2.550	V
Deviation of reference input Voltage Over temperature (note)	$\Delta V_{ref}/\Delta T$	$V_{KA}=V_{REF}$, $I_{KA}=10\text{mA}$ $T_{min}\leq T_A\leq T_{max}$		4.5	17	mV
Ratio Of Change in Reference Input Voltage to the change in Cathode Voltage	$\Delta V_{ref}/\Delta V_{KA}$	$I_{KA}=10\text{mA}$	$\Delta V_{KA}=10\text{V}\sim V_{REF}$	-1.0	-2.7	m V/V
			$\Delta V_{KA}=36\text{V}\sim 10\text{V}$	-0.5	-2.0	
Reference Input Current	I_{ref}	$I_{KA}=10\text{mA}$, $R_1=10\text{K}\Omega$ $R_2=\infty$		1.5	4	μA
Deviation Of Reference Input Current Over Full Temperature Range	$\Delta I_{ref}/\Delta T$	$I_{KA}=10\text{mA}$, $R_1=10\text{K}\Omega$ $R_2=\infty$ $T_A=\text{full Temperature}$		0.4	1.2	μA
Minimum cathode current for regulation	$I_{KA}(\text{min})$	$V_{KA}=V_{REF}$		0.45	1.0	mA
Off-state cathode Current	$I_{KA}(\text{OFF})$	$V_{KA}=36\text{V}$, $V_{REF}=0$		0.05	1.0	μA
Dynamic Impedance	Z_{KA}	$V_{KA}=V_{REF}$, $I_{KA}=1$ to 100mA $f\leq 1.0\text{KHz}$		0.15	0.5	Ω

Note: $T_{MIN}=0^\circ\text{C}$, $T_{MAX}=+70^\circ\text{C}$

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