



SOT-23 Encapsulate Adjustable Reference Source

CJ432 Adjustable Accurate Reference Source

DEVICE DESCRIPTION

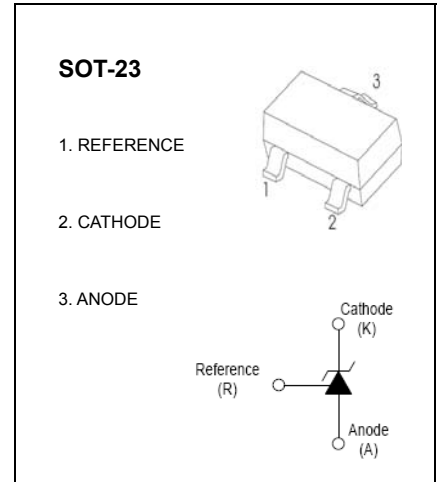
The CJ432 is a three-terminal Shunt Voltage Reference providing a highly accuracy 1.24V. The CJ432 thermal stability and wide operating current, makes is suitable for all variety of applications that are looking for a low cost solution with high performance.

FEATURES

- Low dynamic output impedance
- The effective temperature compensation in the working range of full temperature
- Low output noise voltage
- Fast on -state response
- Sink current capability of 0.1mA to100mA

APPLICATION

- Shunt Regulator
- High-Current Shunt Regulator
- Precision Current Limiter



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

Parameter	Symbol	Value	Units
Cathode Voltage	V_{KA}	18	V
Cathode Current Range (continuous)	I_{KA}	100	mA
Reference Input Current Range	I_{ref}	6	μA
Power Dissipation	P_D	350	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}C/W$
Operating Temperature	T_{opr}	0~+70	$^{\circ}C$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{stg}	-65~+150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

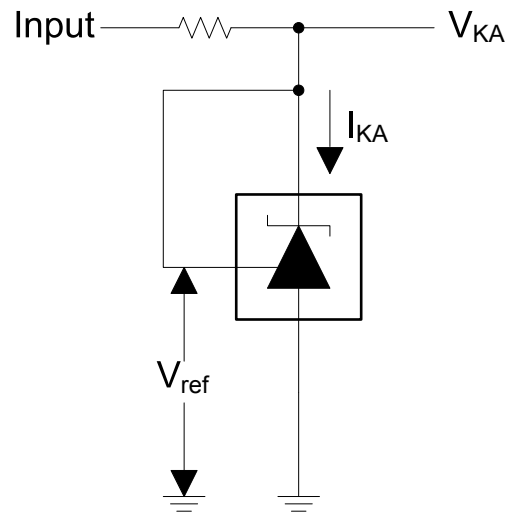
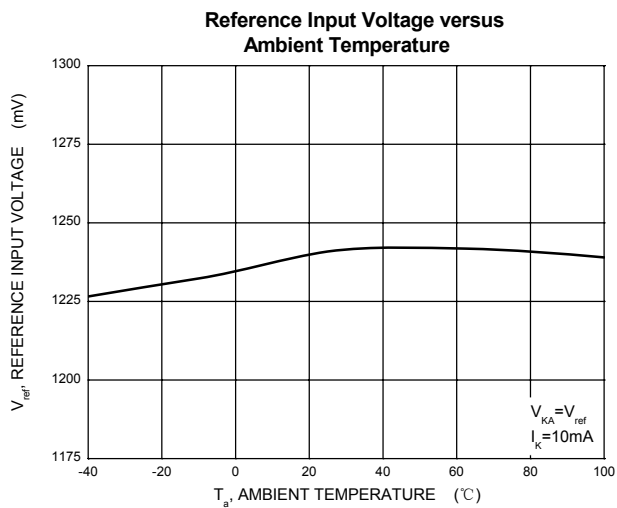
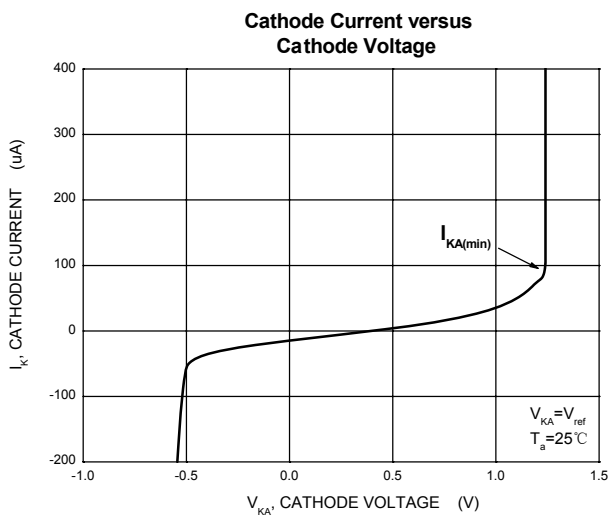
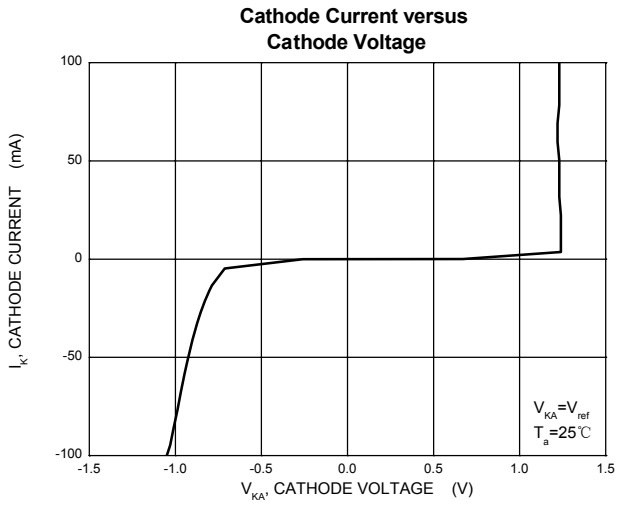
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reference input voltage (Fig 1)	V _{ref}	V _{KA} =V _{REF} , I _{KA} =10mA	1.2214		1.2586	V
Deviation of reference voltage over full temperature range (Fig 1)	ΔV _{ref(DEV)}	V _{KA} =V _{REF} , I _{KA} =10mA 0°C≤T _a ≤70°C			16	mV
Ratio of change in reference input voltage to the change in cathode voltage (Fig 2)	ΔV _{ref} /ΔV _{KA}	I _{KA} =10mA, ΔV _{KA} =1.25V~15V			2.4	mV/V
Deviation of reference input current over full temperature range (Fig 2)	ΔI _{ref} /ΔT	I _{KA} =10mA, R ₁ =10kΩ, R ₂ =∞, 0°C≤T _a ≤70°C			0.6	μA
Minimum cathode current for regulation (Fig 1)	I _{KA(min)}	V _{KA} =V _{REF}			0.1	mA
Off-state cathode current(Fig 3)	I _{off}	V _{KA} =15V, V _{REF} =0			0.5	μA
Dynamic impedance	Z _{KA}	V _{KA} =V _{REF} , I _{KA} =0.1 ~20mA, f≤1.0kHz			0.5	Ω

CLASSIFICATION OF V_{ref}

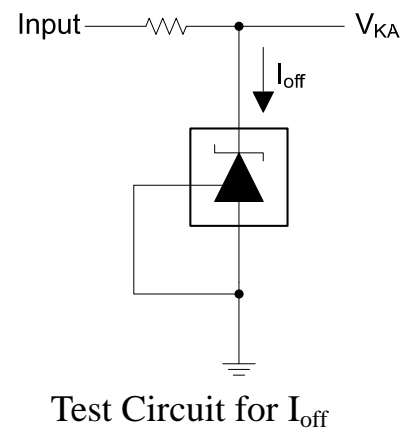
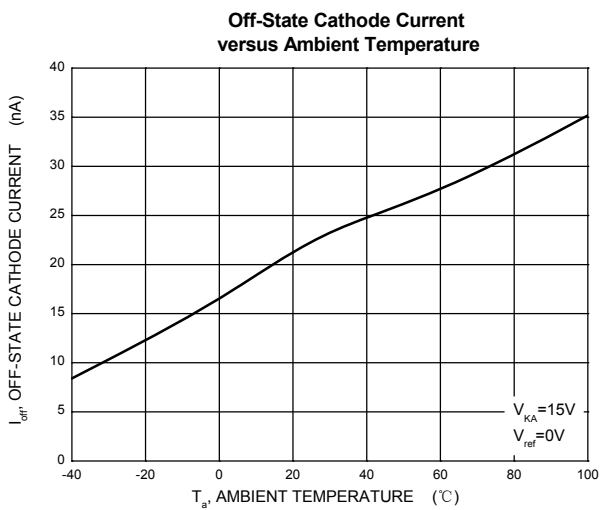
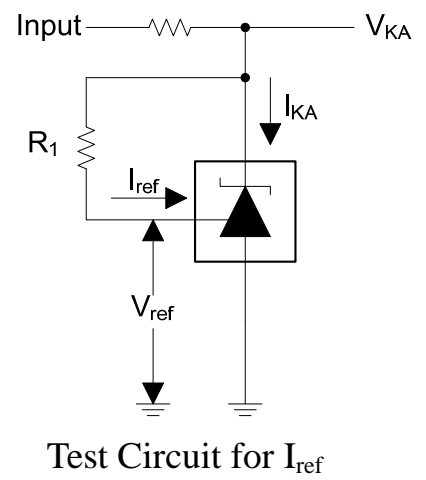
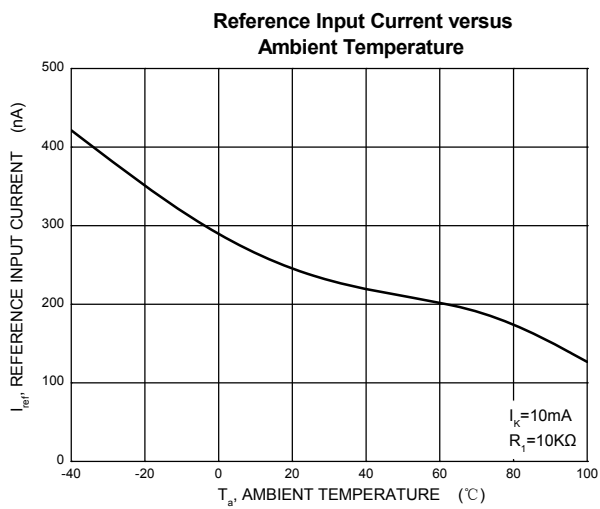
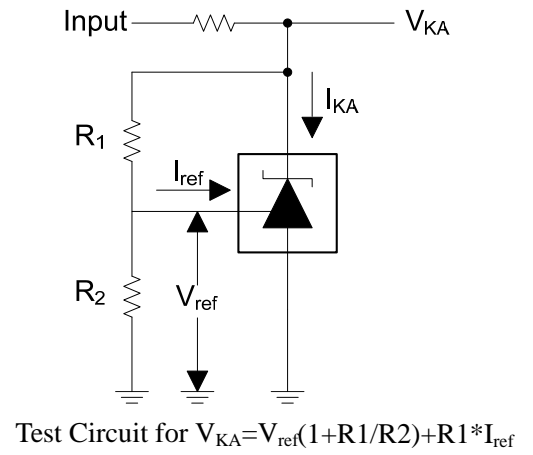
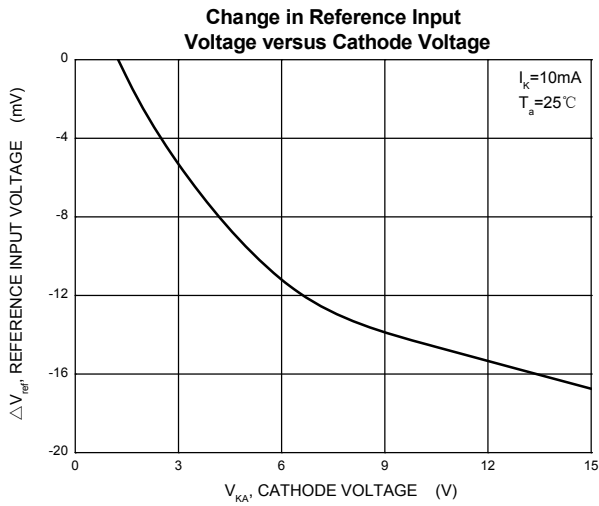
Rank	1%	1.5%
Range	1.2276~1.2524	1.2214~1.2586

Typical Characteristics

CJ432



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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Voltage References](#) category:

Click to view products by [Changjiang](#) manufacturer:

Other Similar products are found below :

[622664A](#) [636116E](#) [748389C](#) [AS431ARTR-E1](#) [NCP431BCSNT1G](#) [NCP432BCSNT1G](#) [NCV431BSNT1G](#) [AP4313UKTR-G1](#)
[TL1431AIYDT](#) [AZ431BR-ATRE1](#) [622668D](#) [NCP432BVSNT1G](#) [5962-8686103XC](#) [NCV431BVDMR2G](#) [AZ432BNTR-G1](#)
[AP4306BUKTR-G1](#) [SC431BVSNT1G](#) [MAX6023EBT30+T](#) [NCV431ASNT1G](#) [LM4040CEM3-5.0/V+T](#) [LT1460KCS3-3#TRM](#)
[LT1460KCS3-3.3#TRM](#) [LT1019AIS8-2.5](#) [LT6660KCDC-10#TRMPBF](#) [LTC6652BHLS8-5#PBF](#) [LTC6652AHLS8-4.096#PBF](#)
[LTC6655BHLS8-4.096#PBF](#) [LT6660HCDC-5#TRMPBF](#) [LM336Z-2.5#PBF](#) [LT1021BMH-10](#) [SC431ILPRAG](#) [TLVH431MIL3T](#)
[MAX6023EBT21+T](#) [AP432AQG-7](#) [ADR4540CRZ](#) [LM4040B25QFTA](#) [TS3325AQPR](#) [REF102AU/2K5](#) [TL4050B25QDBZR](#)
[TL4051C12QDCKR](#) [TL431ACZ](#) [KA431SLMF2TF](#) [KA431SMF2TF](#) [KA431SMFTF](#) [LM385BXZ/NOPB](#) [LM4040QCEM3-3.0/NOPB](#)
[LM4041C12ILPR](#) [LM4050AEM3X-5.0/NOPB](#) [LM4050AIM3X-5.0/NOPB](#) [LM4120AIM5-2.5/NOP](#)