



**THE DATASHEET OF
AZ574ZTR-G1**



33V HIGH PRECISE VOLTAGE REFERENCE**AZ574****General Description**

The AZ574 is a monolithic integrated voltage stabilizer especially designed for TV tuners.

The AZ574 is available in TO-92-2 package.

Features

- Low Temperature Coefficient
- Low Dynamic Impedance
- Typical Reference Voltage of 33V
- High Cathode Current Capacity up to 30mA

Applications

- TV Tuners

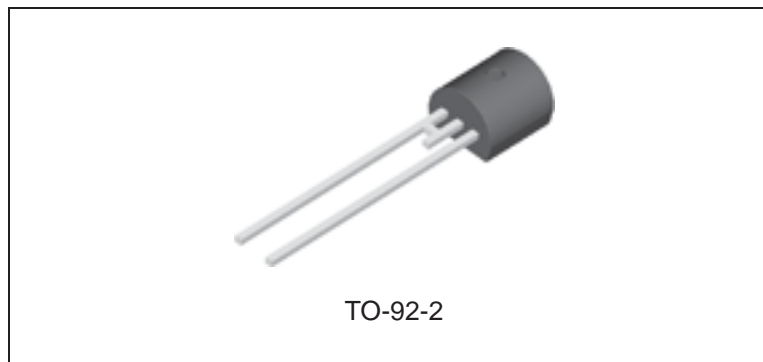


Figure 1. Package Type of AZ574

33V HIGH PRECISE VOLTAGE REFERENCE

AZ574

Pin Configuration

Z Package
(TO-92-2)

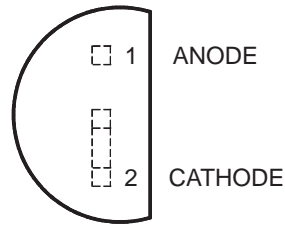


Figure 2. Pin Configuration of AZ574 (Top View)

Functional Block Diagram

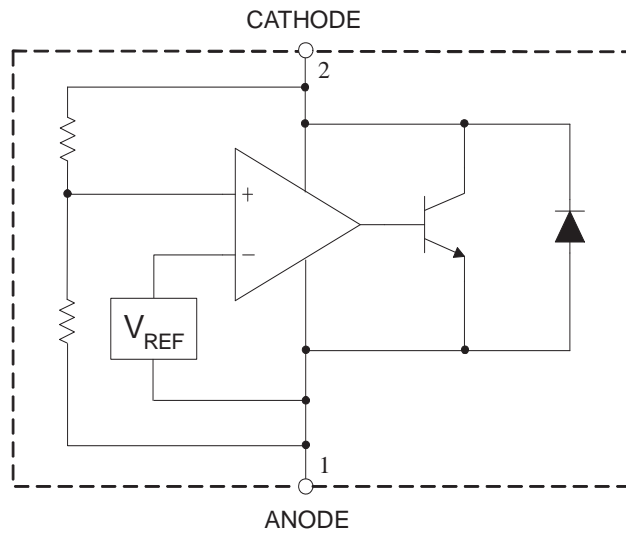


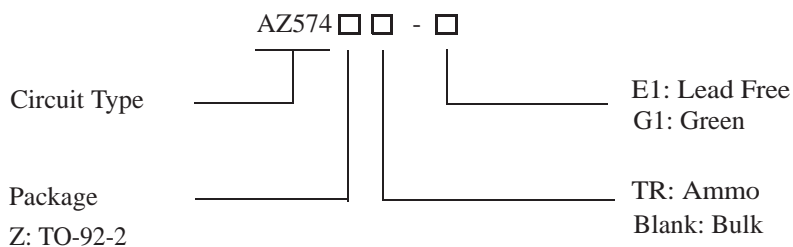
Figure 3. Functional Block Diagram of AZ574



33V HIGH PRECISE VOLTAGE REFERENCE

AZ574

Ordering Information



Package	Temperature Range	Part Number		Marking ID		Packing Type
		Lead Free	Green	Lead Free	Green	
TO-92-2	-20 to 75°C	AZ574Z-E1	AZ574Z-G1	AZ574Z-E1	AZ574Z-G1	Bulk
		AZ574ZTR-E1	AZ574ZTR-G1	AZ574Z-E1	AZ574Z-G1	Ammo

BCD Semiconductor's Pb-free products, as designated with "E1" suffix in the part number, are RoHS compliant. Products with "G1" suffix are available in green packages.

**33V HIGH PRECISE VOLTAGE REFERENCE****AZ574****Absolute Maximum Ratings (Note 1)**

Parameter	Symbol	Value	Unit
Cathode Current	I_{KA}	40	mA
Power Dissipation	P_D	700 ($T_A=75^\circ\text{C}$)	mW
Storage Temperature	T_{STG}	-40 to 125	$^\circ\text{C}$

Note 1: Stresses greater than those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under "Recommended Operating Conditions" is not implied. Exposure to "Absolute Maximum Ratings" for extended periods may affect device reliability.

Recommended Operating Conditions

Parameter	Symbol	Min	Max	Unit
Operating Ambient Temperature	T_A	-20	75	$^\circ\text{C}$
Operating Cathode Current	I_{KA}	1.5	30	mA

Electrical Characteristics

($T_A=25^\circ\text{C}$, unless otherwise specified.)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Cathode Voltage	V_{KA}	$I_{KA}=5\text{mA}$	31		35	V
Cathode Voltage Temperature Drift	$\Delta V_{KA}/\Delta T$	$I_{KA}=5\text{mA}$, $T_A=-20$ to 75°C (Note 2)		0.6		mV/ $^\circ\text{C}$
Dynamic Impedance	Z_{KA}	$I_{KA}=5\text{mA}$, $f=1\text{KHz}$, $I_{AC}=0.5\text{mA}$		5	12	Ω

Note 2: Cathode voltage temperature drift is defined as maximum (worst case) change divided by the total temperature range.



33V HIGH PRECISE VOLTAGE REFERENCE

AZ574

Typical Performance Characteristics

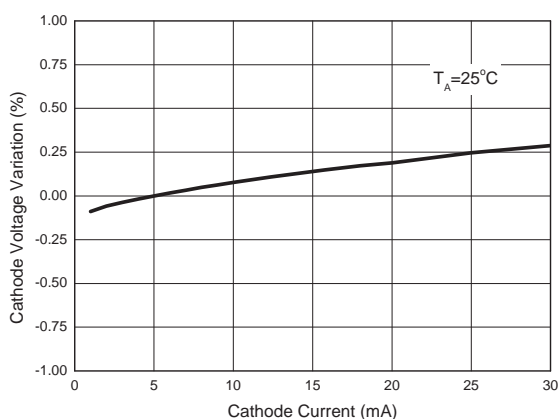


Figure 4. Cathode Voltage Variation vs. Cathode Current

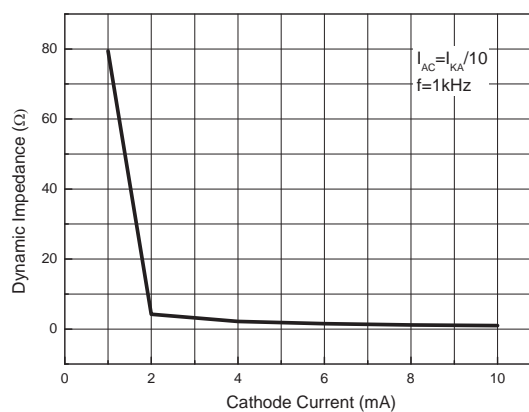


Figure 5. Dynamic Impedance vs. Cathode Current

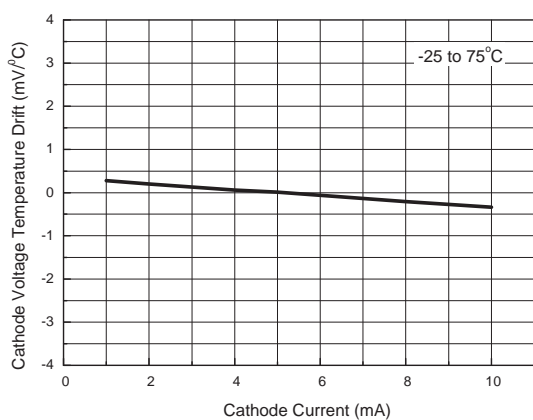


Figure 6. Cathode Voltage Temperature Drift vs. Cathode Current

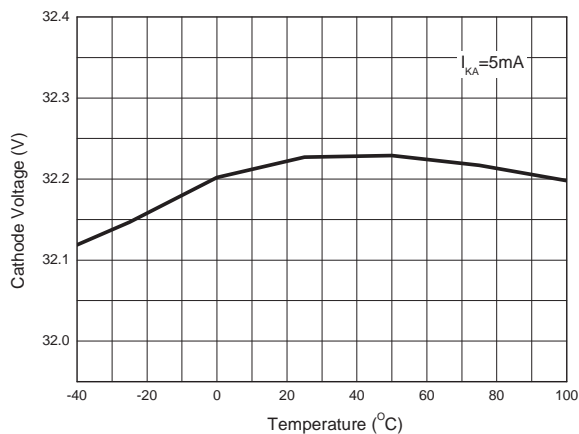


Figure 7. Cathode Voltage vs. Temperature

Typical Performance Characteristics (Continued)

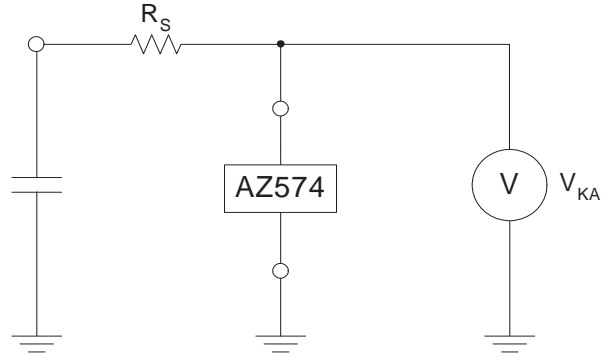
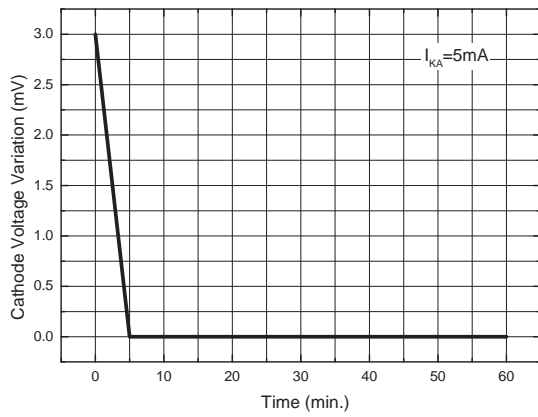


Figure 8. Cathode Voltage Variation vs. Time

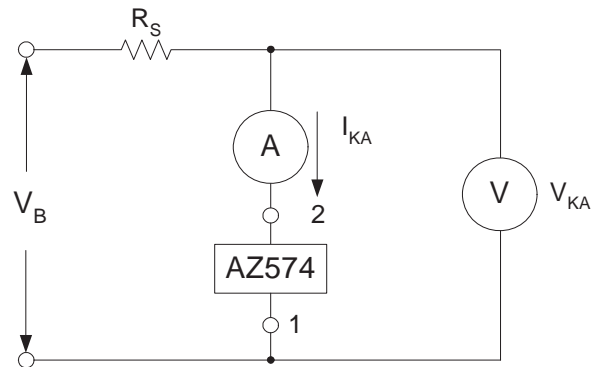
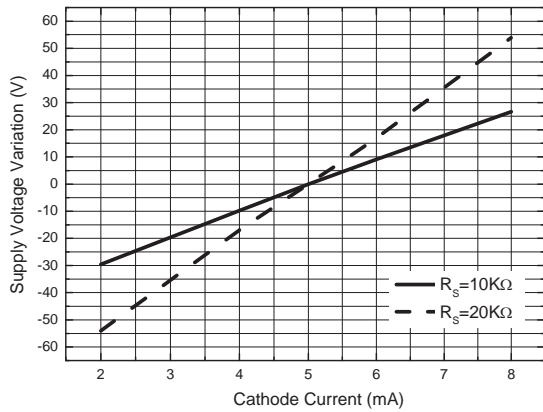


Figure 9. Supply Voltage Variation vs. Cathode Current

33V HIGH PRECISE VOLTAGE REFERENCE

AZ574

Typical Application

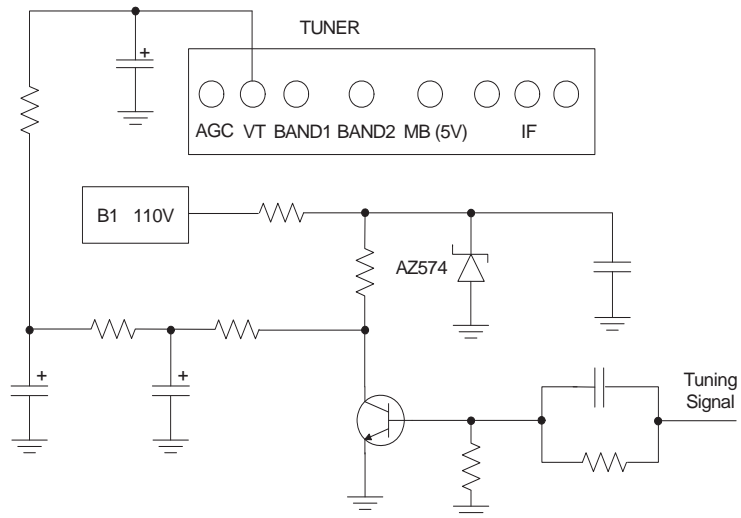


Figure 10. Typical Application of AZ574



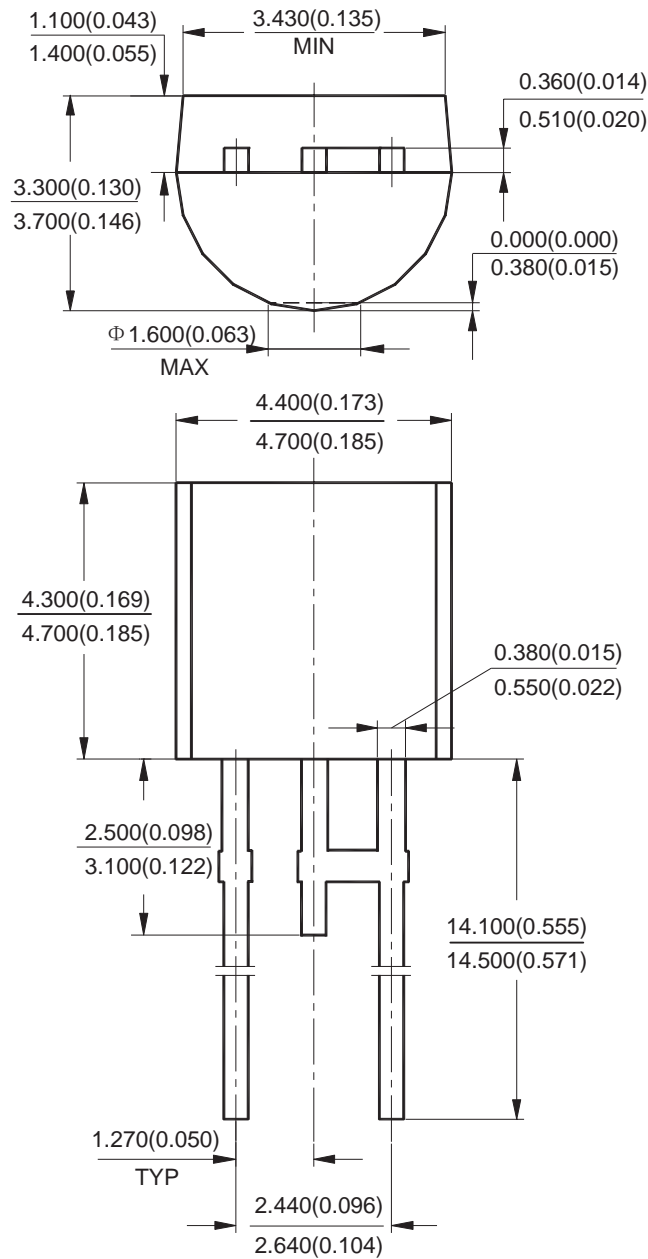
33V HIGH PRECISE VOLTAGE REFERENCE

AZ574

Mechanical Dimensions

TO-92-2

Unit: mm(inch)





BCD Semiconductor Manufacturing Limited

<http://www.bcdsemi.com>

IMPORTANT NOTICE

BCD Semiconductor Manufacturing Limited reserves the right to make changes without further notice to any products or specifications herein. BCD Semiconductor Manufacturing Limited does not assume any responsibility for use of any its products for any particular purpose, nor does BCD Semiconductor Manufacturing Limited assume any liability arising out of the application or use of any its products or circuits. BCD Semiconductor Manufacturing Limited does not convey any license under its patent rights or other rights nor the rights of others.

MAIN SITE

- Headquarters

BCD (Shanghai) Micro-electronics Limited

No. 1600, Zi Xing Road, Shanghai ZiZhu Science-based Industrial Park, 200241, P. R. C.
Tel: +86-021-2416-2266, Fax: +86-021-2416-2277

- Wafer Fab

Shanghai SIM-BCD Semiconductor Manufacturing Co., Ltd.

800 Yishan Road, Shanghai 200233, China
Tel: +021-6485-1491, Fax: +86-021-5450-0008

REGIONAL SALES OFFICE

Shenzhen Office

Shanghai SIM-BCD Semiconductor Manufacturing Co., Ltd., Shenzhen Office

Unit A Room 1203, Skyworth Bldg., Gaoxin Ave.1.S., Nanshan District
Shenzhen 518057, China
Tel: +86-0755-8660-4900, Fax: +86-0755-8660-4958

Taiwan Office (Taipei)

BCD Semiconductor (Taiwan) Company Limited

3F, No.17, Lane 171, Sec. 2, Jiu-Zong Rd., Nei-Hu Dist., Taipei(114), Taiwan, R.O.C
Tel: +886-2-2656 2808
Fax: +886-2-2656-2806/26562950

Taiwan Office (Hsinchu)

BCD Semiconductor (Taiwan) Company Limited

8F, No.176, Sec. 2, Gong-Dao 5th Road, East District
HsinChu City 300, Taiwan, R.O.C
Tel: +886-3-5160181, Fax: +886-3-5160181

USA Office

BCD Semiconductor Corp.

48460 Kato Road, Fremont, CA 94538, USA
Tel: +1-510-668-1950
Fax: +1-510-668-1990

Korea Office

BCD Semiconductor Limited Korea office.

Room 101-1112, Digital-Empire II, 486 Sin-dong,
Yeongtong-Gu, Suwon-city, Gyeonggi-do, Korea
Tel: +82-31-695-8430

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View AZ574ZTR-G1 on WIN SOURCE](#)
-  [Diodes Incorporated](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management