



DESCRIPTION

The A4006 is a single lithium battery charge indicator chip, using CMOS process to achieve, small size and ease of installation of portable products.

The A4006 with built-in comparator and feedback loop, to materialize the detection of the four voltage point. By the internal trimming technology, you can ensure that the voltage detection accuracy of $\pm 1\%$. The output using OPENDRAIN structure, ease of customer use IO ports or LED indication.

The A4006 is available in SOT-26 package.

ORDERING INFORMATION

Package Type	Part Number	
SOT-26 SPQ: 3,000pcs/Reel	E6	A4006E6R
		A4006E6VR
Note	V: Halogen free Package R: Tape & Reel	
AiT provides all RoHS products		

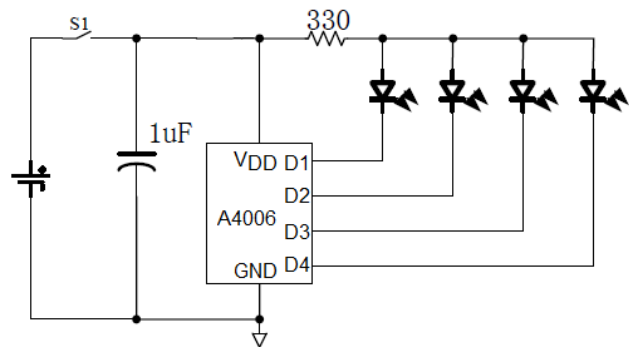
FEATURES

- Ultra-low current consumption:<10uA
- Built - in 4-way comparator, the detection of the four voltage point
- The internal comparator with reasonable hysteresis, is easy to charge and discharge instructions.
- High-precision detection voltage $\pm 1\%$
- Available in SOT-26 Package

APPLICATION

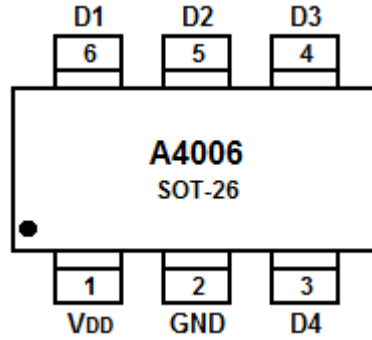
- Mobile Power
- LED flashlight
- Portable electronic devices

TYPICAL APPLICATION





PIN DESCRIPTION



Top View

Pin #	Symbol	Function
1	V _{DD}	Electric Power Source
2	GND	Ground Terminal
3,4,5,6	D1~D4	LED1-LED4 Output Indicates

ABSOLUTE MAXIMUM RATINGS

V _{CC} , Power Supply Voltage	V _{SS} -0.3V ~ V _{SS} +7V
V _{D1} -V _{D4} , D1-D4 Pressure-Proof	V _{SS} -0.3V ~ V _{CC} +0.3V
I _{D1} -I _{D4} , D1-D4 Output Current	30mA

Stress beyond above listed "Absolute Maximum Ratings" may lead permanent damage to the device. These are stress ratings only and operations of the device at these or any other conditions beyond those indicated in the operational sections of the specifications are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



ELECTRICAL CHARACTERISTICS

T_A=25°C, unless specifically designated

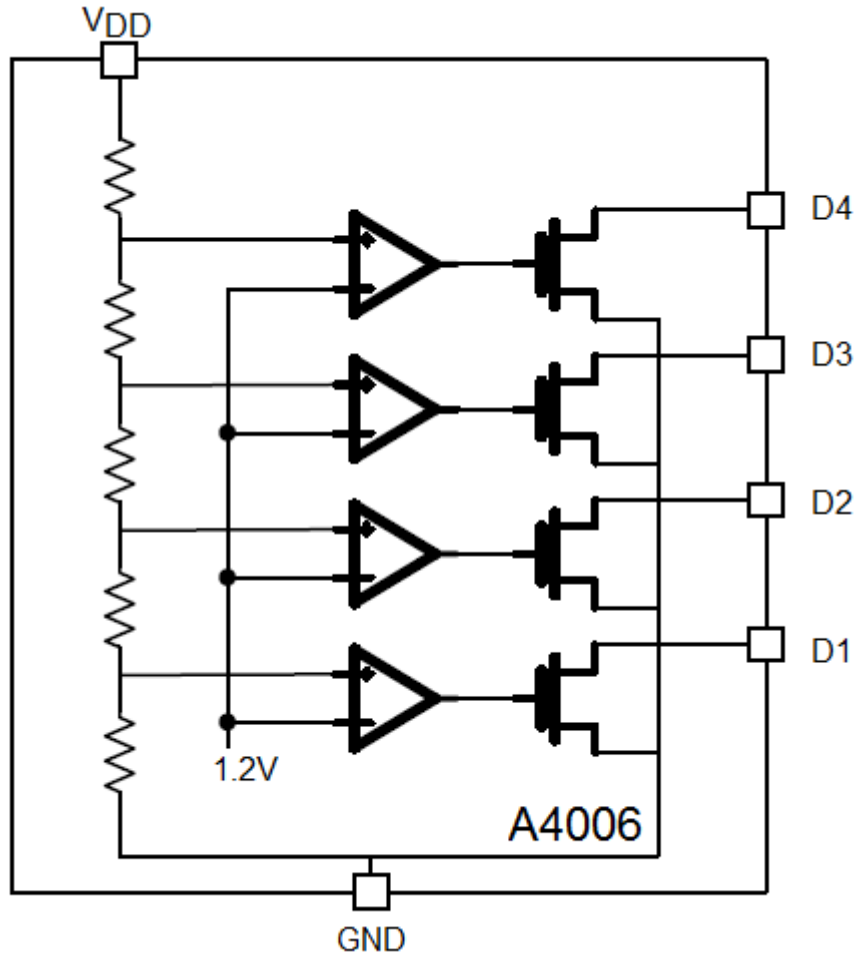
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Input Supply Voltage	V _{CC}		2	-	6.5	V
Output Current	I _{Dx}	V _{CC} =3.5V	2	5	10	mA
Quiescent Operating Current	I _{SS}	V _{CC} =4.5V	5	8	10	µA
V _{D4} rising detect voltage	V _{D4R}	V _{CC} rising	-	3.87	-	V
V _{D4} falling detect voltage	V _{D4D}	V _{CC} falling	-	3.8	-	
V _{D3} rising detect voltage	V _{D3R}	V _{CC} rising	-	3.7	-	
V _{D3} falling detect voltage	V _{D3D}	V _{CC} falling	-	3.64	-	
V _{D2} rising detect voltage	V _{D2R}	V _{CC} rising	-	3.55	-	
V _{D2} falling detect voltage	V _{D2D}	V _{CC} falling	-	3.50	-	
V _{D1} rising detect voltage	V _{D1R}	V _{CC} rising	-	3.4	-	
V _{D1} falling detect voltage	V _{D1D}	V _{CC} falling	-	3.1	-	

LED STATE

BAT VOLTAGE RANGE (V)	V _{D1}	V _{D2}	V _{D3}	V _{D4}
3.87~4.2	ON	ON	ON	ON
3.7~3.87	ON	ON	ON	OFF
3.55~3.7	ON	ON	OFF	OFF
3.4~3.55	ON	OFF	OFF	OFF
Below 3.4	OFF	OFF	OFF	OFF



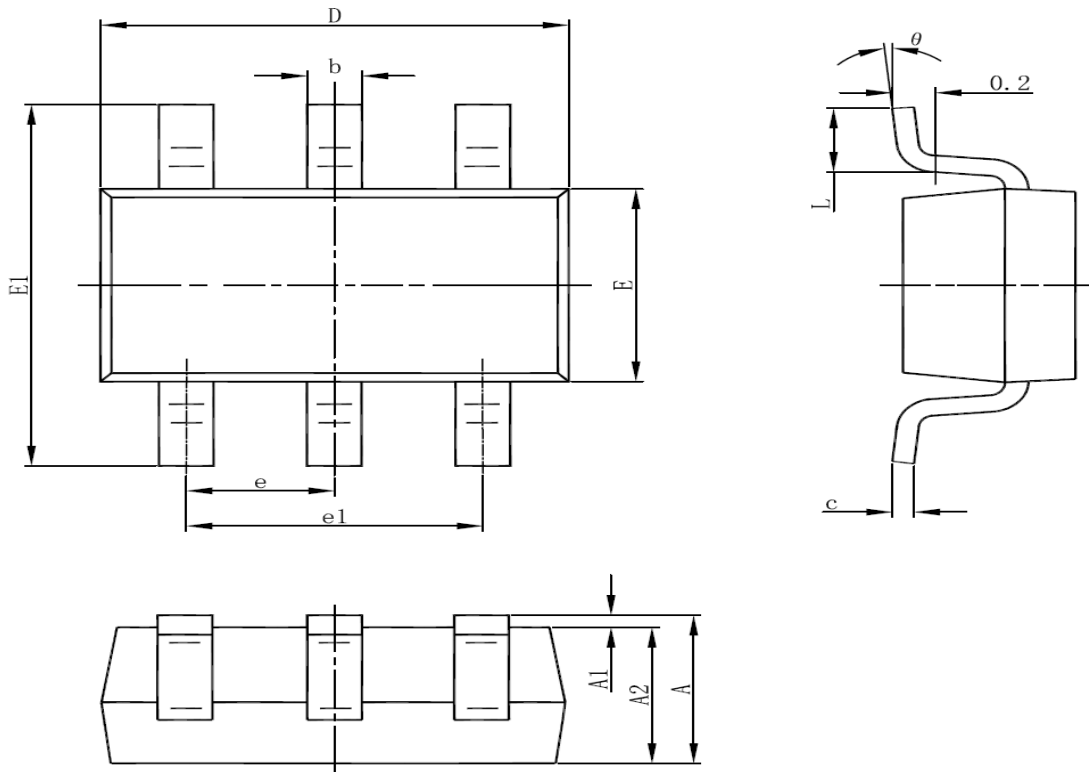
BLOCK DIAGRAM





PACKAGE INFORMATION

Dimension in SOT-26 Package (Unit: mm)



Symbol	Millimeters		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	0.500	0.012	0.020
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	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°



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