



# ACE5229Z

## 1A, Low IQ, Low Dropout Voltage Regulator

### Description

ACE5229Z is a low dropout (LDO) voltage regulator capable of sourcing 1A with only 140mV of dropout. ACE5229Z output is adjustable with external resistors from 0.8V to 5V. ACE5229Z wide input-voltage range supports operation as low as 1.8V and up to 5.5 V.

ACE5229Z is designed to have high accuracy, 2% at output voltage over line, load, and temperature. And ACE5229Z soft-start capabilities to reduce in-rush current. ACE5229Z is ideal for powering sensitive analog low-voltage devices. ACE5229Z is available in SOT89-5, HFBP1.2\*1.6-8, DFN1.2\*1.6-8, DFN2\*2-6L and DFN2\*2-8 packages.

### Features

- Programmable Output Voltage Configuration
- High Accuracy Output Voltage:  $\pm 2\%$
- Wide Input Voltage Range: 1.8V to 5.5V
- Wide Output Voltage Range: 0.8V to 5V
- Low Power Consumption: 20 $\mu$ A Quiescent Current
- Low Dropout: 140mV at 1A
- Fast Transient Response
- Stable with Small 1 $\mu$ F Capacitor
- Inrush Current Protection
- Available in SOT89-5, HFBP1.2\*1.6-8, DFN1.2\*1.6-8, DFN2\*2-6L, and DFN2\*2-8

### Application

- USB Ports and Hubs
- Digital TVs
- Set-Top Boxes
- VOIP Phones

### Absolute Maximum Rating

Parameter	Value
IN, OUT Pin Voltage to GND	-0.3V to 5.5V
FB, EN Pin Voltage to GND	-0.3V to 5.5V
OUT to ground current	Internally limited
Operating Temp Range	-40°C to 85°C
Storage Temp Range	-55°C to 170°C



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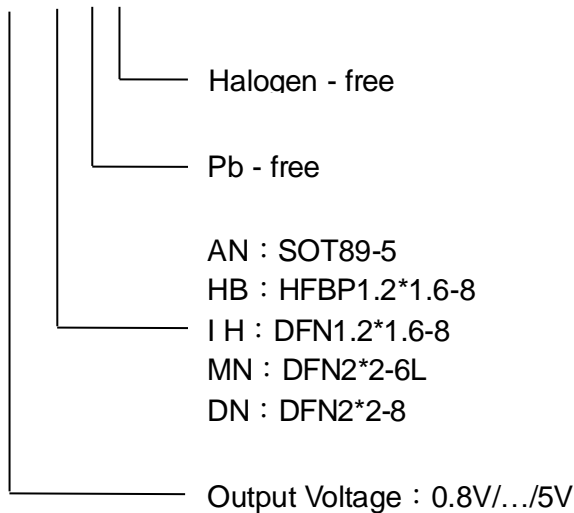
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Parameter			Value
Thermal Resistance	$\theta_{JC}$	SOT89-5	47 °C/W
		HFBP1.2*1.6-8	30 °C/W
		DFN1.2*1.6-8	30 °C/W
		DFN2*2-6L	30 °C/W
		DFN2*2-8	20 °C/W
	$\theta_{JA}$	SOT89-5	77 °C/W
		HFBP1.2*1.6-8	111 °C/W
		DFN1.2*1.6-8	111 °C/W
		DFN2*2-6L	92 °C/W
		DFN2*2-8	80 °C/W
Lead Temp (Soldering, 10sec)			260 °C
ESD HBM (Human Body Mode)			3KV

(Note: Exceeding these limits may damage the device. Exposure to absolute maximum rating conditions for long periods may affect device reliability.)

### Ordering Information

ACE5229Z XX XX + H





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### Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Technology Co., LTD.

As sued herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

ACE Technology Co., LTD.

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