



# ACE6718LA

## 1.8MHZ Zero-Drift CMOS Rail-to-Rail IO Opamp

### Description

ACE6718LA (single / dual / quad) operates from a single 1.8V to 5.5V supply or dual  $\pm 0.9V$  to  $\pm 2.75V$  supplies, the amplifiers offer bandwidth of 1.8MHz, rail-to-rail inputs and outputs. The ACE6718LA amplifier is micro-power, zero-drift CMOS operational amplifiers, ACE6718LA uses chopper stabilized technique to provide very low offset voltage (less than 30 $\mu V$  maximum) and near zero drift over temperature. The ACE6718LA offers excellent CMRR without the crossover associated with traditional complementary input stages.

### Features

- Single-Supply Operation from 1.8V to 5.5V
- Low Offset Voltage: 30 $\mu V$  (Max@25°C)
- Zero Drift: 0.01 $\mu V/^\circ C$  (TYP)
- Gain-Bandwidth Product: 1.8MHz (TYP @25°C)
- Low Input Bias Current: 20pA (TYP @25°C)
- Quiescent Current: 180 $\mu A$  per Amplifier (TYP)
- Operating Temperature: -45°C ~ 125°C
- Embedded RF Anti-EMI Filter
- Rail-to-Rail Input / Output
- Small Package: SOT-23-5/ SOP-8/ MSOP-8/ SOP-14/ TSSOP-14

### Application

- Internet of Things
- Automatic control
- ECG equipment
- Medical equipment



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### Absolute Maximum Ratings

Parameter		Rating	Unit	
Power Supply Voltage ( $V_{DD}$ to $V_{SS}$ )		-0.5 to 7.5	V	
Analog Input Voltage (IN+ or IN-)		$V_{SS}-0.5$ to $V_{DD}+0.5$	V	
PDB Input Voltage		$V_{SS}-0.5$ to 7	V	
Operating Temperature Range		-45 to 125	°C	
Junction Temperature		160	°C	
Storage Temperature Range		-55 to 150	°C	
Lead Temperature (soldering, 10sec)		260	°C	
Package Thermal Resistance ( $T_A=25^\circ\text{C}$ )	SOT-23-5	$\theta_{JA}$	190	°C/W
	SOP-8		125	°C/W
	MSOP-8		216	°C/W
ESD Susceptibility	HBM		6	KV
	MM		400	V

Note:

Stress greater than those listed under Absolute Maximum Ratings may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions outside those indicated in the operational sections of this specification are not implied. Exposure to absolute maximum rating conditions for extended periods may affect reliability.

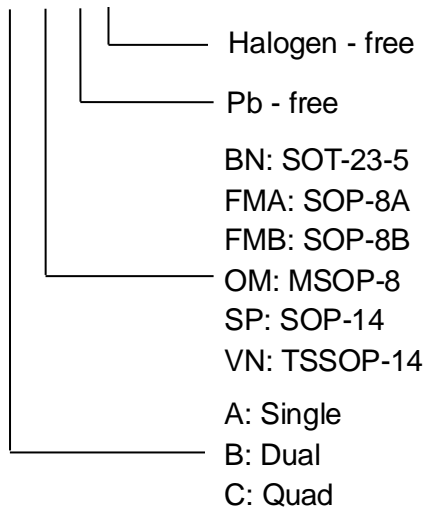


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## Ordering Information

ACE6718LA X 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 used 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.

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