



ACE6755LA

550nA Nanopower, Rail-to-Rail Input/Output Op-amps

Description

The ACE6755LA (single / dual / quad) operational amplifiers are guaranteed to operate with a single supply voltage as low as 1.4V, while drawing 550nA/Amplifier (TYP) of quiescent current. These devices are also designed to support rail-to-rail input and output operation. This combination of features supports battery-powered and portable applications. The ACE6755LA have a gain-bandwidth product of 10kHz (TYP) and are unity gain stable. These specifications make the operational amplifiers appropriate for low frequency applications, such as battery current monitoring and sensor conditioning. They operate over an ambient temperature range of -40°C to 125°C.

Features

- Wide Supply Voltage Range: 1.4V to 5.5V
- Low Offset Voltage: 0.4mV (TYP)
- Low Quiescent Current: 550nA (TYP)
- Gain-Bandwidth Product: 10kHz (TYP)
- Rail-to-Rail Input and Output
- -40°C to 125°C Operating Temperature Range
- Packages: SOT-23-5/ SC-70-5/ SOP-8/ MSOP-8/ TDFN-8/ SOP-14/ TSSOP-14

Application

- Handsets and Mobile Accessories
- Wearable Products
- Battery or Solar Powered Device
- Environment/ Gas/ Oxygen Sensors



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Absolute Maximum Ratings

Parameter		Rating	Unit	
Power Supply Voltage (V_{DD} to V_{SS})		-0.5 to 6	V	
Analog Input Voltage (IN+ or IN-)		$V_{SS}-0.3$ to $V_{DD}+0.5$	V	
PDB Input Voltage		$V_{SS}-0.3$ to 6	V	
Operating Temperature Range		-40 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	θ_{JA}	190	°C/W
	SC-70-5		333	°C/W
	SOP-8		125	°C/W
	MSOP-8		216	°C/W
ESD Susceptibility	HBM	5	KV	

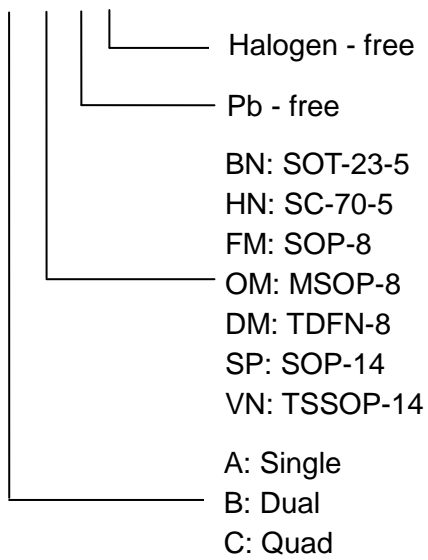


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Ordering Information

ACE6755LA 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.

ACE Technology Co., LTD.
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