



Anloy Technologies

High Voltage
Operational Amplifier

ATLM143/ATLM343

Die Manufacturers Available	Device Pin Outs
» National Semiconductor	<p>Top View</p> <p>TO-99 - H Suffix</p>
Product Features	
<ul style="list-style-type: none"> » Operating Temperature range of +125°C to -55°C » Wide supply voltage range: $\pm 4.0V$ to $\pm 40V$ » Large output voltage swing: $\pm 37V$ » Wide input common-mode range: $\pm 38V$ » Input overvoltage protection: Full $\pm 40V$ » Low input bias current: 8.0 nA » Low input offset current: 1.0 nA » High slew rate : 2.5V/μs » High voltage gain—virtually independent of resistive loading, temperature, and supply voltage: 100k min » Internally compensated for unity gain » Output short circuit protection » Pin compatible with general purpose op amps 	

General Description

The ATLM143 is a general purpose high voltage operational amplifier featuring operation to $\pm 40V$, complete input overvoltage protection up to $\pm 40V$ and input currents comparable to those of other super-b op amps. Increased slew rate, together with higher common-mode and supply rejection, insure improved performance at high supply voltages. Operating characteristics, in particular supply current, slew rate and gain, are virtually independent of supply voltage and temperature. Furthermore, gain is unaffected by output loading at high supply voltages due to thermal symmetry on the die. The ATLM143 is pin compatible with general purpose op amps and has offset null capability. Application areas include those of general purpose op amps, but can be extended to higher voltages and higher output power when externally boosted. For example, when used in audio power applications, the ATLM143 provides a power bandwidth that covers the entire audio spectrum. In addition, the ATLM143 can be reliably operated in environments with large overvoltage spikes on the power supplies, where other internally-compensated op amps would suffer catastrophic failure. The ATLM343 is similar to the ATLM143 for applications in less severe supply voltage and temperature environments. For further electrical specifications please contact Anloy Technologies or reference the original die manufacturers datasheet.