

## Single Rail-to-Rail Operational Amplifiers

### Features

- Wide Supply Operation Range +4.5V to +20V
- Beyond the Rails Input Capability
- Rail-to-Rail Output Swing
- Low Supply Current, 3mA (Typical)
- Low Input Offset Voltage 2mV (Typical)
- Internal Frequency Compensated for Unit Gain Stable
- Wide Bandwidth (unit gain) 30MHz
- High Slew Rate =150V/ $\mu$ s
- Large DC Voltage Gain 80dB (Typical)
- $\pm$ 180mA Output Short Current
- Embedded Over-Temperature Protection
- Short-Circuit Current Limit Protection
- TSOT-23-5 and SC-70-5 (SOT-353) Package Available

### Applications

- Portable Equipment
- TFT Vcom/Gamma buffers
- Battery-Powered Equipment
- ASIC Input or Output Amplifier
- Low Power/Low Voltage Applications

### General Description

The G1562 is a single rail-to-rail input/output operation amplifier with the low power, high voltage swing. Operating on supplies ranging from 4.5V to 20V, while current consuming only 3mA, the G1562 is with high unit-gain bandwidth of 30MHz. The G1562 also provides common mode input ability beyond the supply rails, as well as rail-to-rail output capability. This enables this amplifier to offer maximum dynamic range at any supply voltage.

The G1562 also features fast slewing and settling times, as well as a high output drive capability of 65mA (sink and source). These features make these amplifiers ideal for high speed filtering and signal conditioning application. Other applications include battery power, TFT Vcom /Gamma buffers, portable devices, and anywhere low power consumption is important.

There are over temperature and short-circuit current limit protection embedded to avoid the unexpected damages. The G1562 is available in TSOT-23-5 and SC-70-5 (SOT-353) package.

### Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1562TO1U	1562x	-40°C~ +85°C	TSOT-23-5
G1562TO2U	152Ax	-40°C~ +85°C	TSOT-23-5
G1562TO3U	152Bx	-40°C~ +85°C	TSOT-23-5
G1562TA1U	15Ax	-40°C~ +85°C	SC-70-5 (SOT-353)
G1562TA2U	15Bx	-40°C~ +85°C	SC-70-5 (SOT-353)
G1562TA3U	15Cx	-40°C~ +85°C	SC-70-5 (SOT-353)

Note: TO: TSOT-23-5 TA: SC-70-5 (SOT-353)  
 1& 2 & 3: Bonding Code  
 U: Tape & Reel

### Pin Configuration

