

TSZ series ultra precision amplifiers



When the highest precision matters

The TSZ amplifier series offers low-power, zero-drift operational amplifiers in space-saving packages. They use chopper-stabilized architecture that provides very low offset voltages (8 μV max over the full operating temperature range) and near-zero drift.

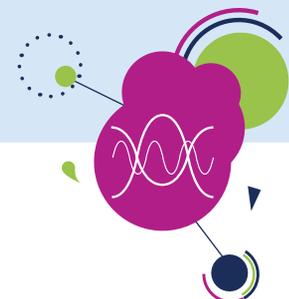
These miniature, ultra-precision and low quiescent current amplifiers offer high-impedance inputs that have a common-mode range 100 mV beyond the rails and rail-to-rail output that swings within 50 mV of the rails. TSZ amplifiers are optimized for low-voltage operation with single or dual supplies as low as +1.8 V (± 0.9 V) up to +5.5 V (± 2.75 V). The chopper architecture rejects the high $1/f$ noise typically found in CMOS input op amps, making it suited for a wide variety of low-frequency measurement applications.

FEATURES

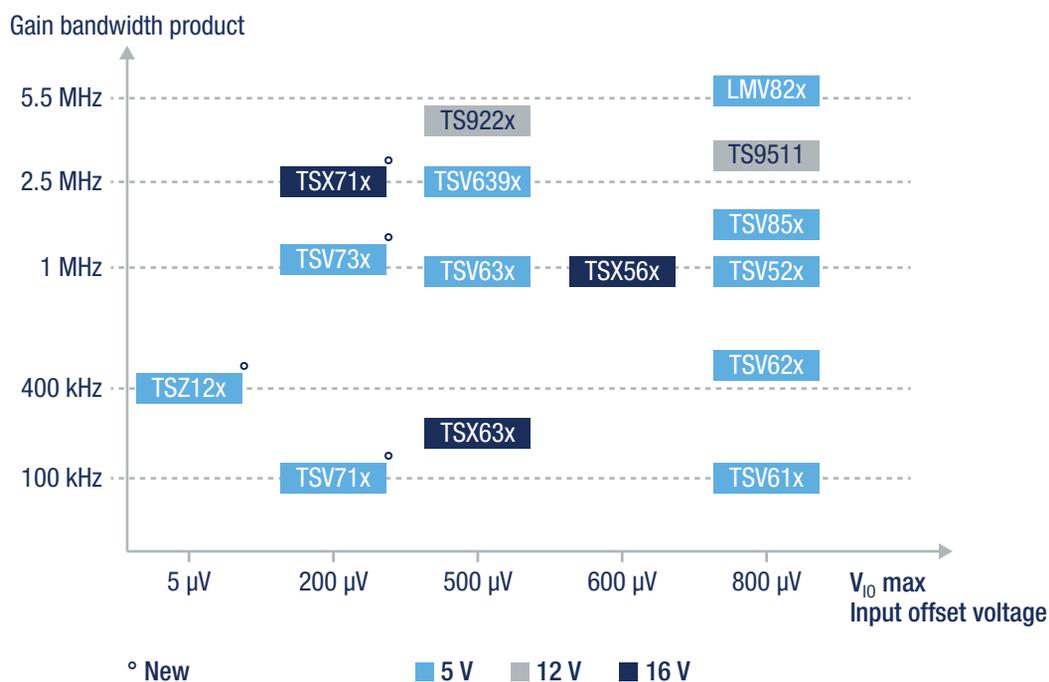
- Offset:
 - +/- 1 μV typ
 - +/- 8 μV very worst case
- Offset drift:
 - 10 nV/ $^{\circ}\text{C}$ typ
 - 30 nV/ $^{\circ}\text{C}$ max
- 400 kHz GBW
- Low 28 μA typ quiescent current
- Operating range: 1.8 to 5.5 V
- Temperature range: -40 to 125 $^{\circ}\text{C}$
- Rail-to-rail input and output
- ESD: 4kV HBM
- Qualified for automotive applications
- Available in tiny packages: SOT23 and DFN2x2

APPLICATIONS

- Portable instrumentation
- Battery-powered devices
- Mobile communications
- Sensor interfaces
- Medical instrumentation
- Electronic scales
- Temperature measurement
- Cardiac monitors



HIGH-PRECISION AMPLIFIER PORTFOLIO



TSZ FAMILY

Order code	Type	Package	Automotive grade
TSZ121ICT	Single	SC70-5	No
TSZ121ILT		SOT23-5	No
TSZ121IYLT			Yes
TSZ122IQ2T	Dual	DFN8 2x2	No
TSZ122IST		MiniS08	No
TSZ122IYST			Yes
TSZ122IDT		S08	No
TSZ124IQ4T	Quad	QFN16 3x3	No
TSZ124IPT		TSSOP14	No
TSZ124IYPT			Yes



STEVAL-CCA022V1

Evaluation board for SOT23 and SC70 available at www.st.com



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