

# STANDARD LINEAR PRODUCTS

TL072 and TL082 industry standard op-amps cover wide operating temperature range

The TL072 and TL082 are industry standard low noise dual op amps. They match competitive parts on package, pinout and performance.

These parts are specified over the industrial temperature range and offer a high performance alternative to competitive devices specified over both consumer and industrial temperature ranges.

The Diodes' parts also have an input offset voltage specification which matches competitive standard and 'A' grade parts.

The TL072 is sold as a low noise version particularly for audio pre amplifier applications.

The TL082 is sold as a device as having best settling time for instrumentation and industrial applications

These dual devices are available in an SO8 package and match the most popular of the competitive options.

### **Key Parameters:**

- JFET input
- Low noise: 18nV/√Hz
- Low input bias current 30pA
- Low input offset current: 5pA
- Wide unity gain bandwidth: 3MHz
- Fast slew rate:  $13\mu$ s
- Operating temperature range: -40 to 85°C
- SO8 package
- Lead free, RoHS compliant, Green mold compound

### **Key Selling Points:**

- Industry standard part number
- Pin to pin compatible with competitive parts from TI and ST
- Price competitive
- Operating temperature range of -40 to 85°C covers both commercial and industrial temperature ranges
- JFET input stage ensures low input bias and offset current
- Low noise suits audio preamplifier applications
- Fast slew rate and wide unity gain bandwidth ideal for instrumentation applications





## **Ordering Information**

Part Number	Package	Green	Tape & Reel	Quantity per reel
TL072SG-13	SO8	Yes	13"	2500
TL082SG-13	SO8	Yes	13"	2500

### **Cross Reference List**

The following provides a simple guide to switching Diodes parts for the most popular industry standard competitors:

Diodes'	ті		STM	
Part Number (operating temperature)	Part Number	Operating Temperature	Part Number	Operating Temperature
TL072SG-13 (-40 to 85°C)	TL072CD TL072CDR TL072ACD TL072ACDR TL072ID TL072IDR	0 to 70°C 0 to 70°C 0 to 70°C 0 to 70°C -40 to 85°C -40 to 85°C	TL072CD TL072CDT TL072ACD TL072ACDT TL072ID TL072IDT	0 to 70°C 0 to 70°C 0 to 70°C 0 to 70°C -40 to 105°C -40 to 105°C
TL082SG-13 (-40 to 85°C)	TL082CD TL082CDR TL082ACD TL082ACDR TL082ID TL082IDR	0 to 70°C 0 to 70°C 0 to 70°C 0 to 70°C -40 to 85°C -40 to 85°C	TL082CD TL082CDT TL082ACD TL082ACDT TL082ID TL082IDT	0 to 70°C 0 to 70°C 0 to 70°C 0 to 70°C -40 to 105°C -40 to 105°C

Note on competitive parts:

Both TI and ST'A' grade parts feature a lower input offset voltage which Diodes match.

