



TC1031

# LINEAR BUILDING BLOCK – LOW POWER COMPARATOR AND VOLTAGE REFERENCE

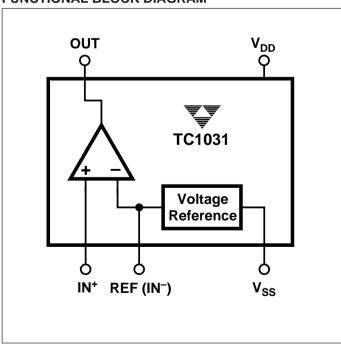
#### **FEATURES**

- Combination Comparator and Reference in a SOT23A-5\* Package
- Rail-to-Rail Inputs and Outputs
- **■** Optimized for Single Supply Operation
- Ultra Low Input Bias Current ..... Less than 100pA
- Low Quiescent Current ...... 6µA Max
- Operates Down to  $V_{DD} = 1.8V$

## **APPLICATIONS**

- Power Supply Circuits
- Embedded Systems
- Instrumentation
- Portable Equipment
- Consumer Products
- **■** Replacements for Discrete Components

### **FUNCTIONAL BLOCK DIAGRAM**



## **GENERAL DESCRIPTION**

The TC1031 is a low power, complimentary output comparator plus voltage reference designed specifically for low power applications.

The TC1031 is designed for operation from a single supply, however, operation from dual supplies is also possible, and the power supply current drain is independent of the magnitude of the power supply voltage. Maximum supply current is  $6\mu A$  and operation is guaranteed to  $V_{DD}=1.8V.$  The input common mode range includes ground and the output swing is rail-to-rail.

Packaged in a space-saving SOT23A-5\*, the TC1031 is ideal for applications requiring high integration, small size and low power.

### ORDERING INFORMATION

Part No.	Package	Temp. Range
TC1031CCT	SOT23A-5*	0°C to +70°C
TC1031ECT	SOT23A-5*	- 40°C to +85°C
TC43EV	Evaluation Kit for Linear	
	Building Block Family	
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NOTE: \* SOT23A-5 is equivalent to the EIAJ (SC-74A)

### **PIN CONFIGURATION**

