
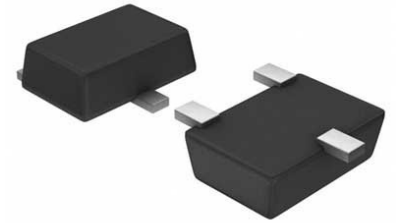


## Standard Timer Single -40°C 125°C Automotive 6-Pin TSOT-23

T/R

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	SOT23-6
<b>Product Type:</b>	Clock & Timer ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The TPL5010 Nano Timer is an ultra-low power timer with a watchdog feature designed for system wake up in duty-cycled, battery-powered applications such as those in IoT. Many of these applications require the use of a  $\mu\text{C}$ , so it is desirable to keep the  $\mu\text{C}$  in a low power mode to maximize current savings, waking up only during certain time intervals to collect data or service an interrupt. Although the internal timer of the  $\mu\text{C}$  can be used for system wake-up, it can single-handedly consume microamps of total system current.

Consuming only 35 nA, the TPL5010 can replace the functionality of the integrated  $\mu\text{C}$  timer. This allows the  $\mu\text{C}$  to be placed in a much lower power mode, with the internal timer off, returning only to active mode upon an interrupt by the TPL5010. By offering power savings of almost two orders of magnitude, the TPL5010 enables the use of significantly smaller batteries for energy harvesting or wireless sensor applications. The TPL5010 provides selectable timing intervals from 100 ms to 7200 s and is designed for interrupt-driven applications. Some standards (such as EN50271) require implementation of a watchdog for safety and the TPL5010 realizes this watchdog function at almost no additional power consumption. The TPL5010 is available in a 6-pin SOT23 package.

### Key Features

Supply Voltage From 1.8 V to 5.5 V

Current Consumption at 2.5 V and 35 nA (Typical)

Selectable Time Intervals: 100 ms to 7200 s

Timer Accuracy: 1% (Typical)

Resistor Selectable Time Interval

Watchdog Functionality

Manual Reset

### Recommended For You

**LMC555CTP**

Texas Instruments, Inc  
DSBGA

**TPL5111DDCT**

Texas Instruments, Inc  
TSOT23-6

**TPL5110DDCR**

Texas Instruments, Inc  
SOT23-6

**TPL5010QDDCTQ1**

Texas Instruments, Inc  
SOT23-6

**LMC555CTP/NOPB**

Texas Instruments, Inc  
DSBGA

**TPL5010DDCR**

Texas Instruments, Inc  
SOT23-6

**TPL5000DGST**

Texas Instruments, Inc  
10-VSSOP

**TPL5111DDCR**

Texas Instruments, Inc  
SOT23-6

**TPL5110DDCT**

Texas Instruments, Inc  
TSOT-23-6

**TPL5010DDCT**

Texas Instruments, Inc  
SOT23-6

**TPL5110QDDCRQ1**

Texas Instruments, Inc  
SOT23-6

**TPL5000DGSR**

Texas Instruments, Inc  
VSSOP10

**TPL5100DGSR**

Texas Instruments, Inc  
VSSOP10

**CDCS504TPWRQ1**

Texas Instruments, Inc  
TSSOP-8

**LMC555CTPX**

Texas Instruments, Inc  
DSBGA