

# QT113 (#604-00038)

## Introduction

The Qt113 touch sensor is a self-contained digital IC with optional latching and momentarily functions. The chip can detect through air and most dielectric type material. The user can also add a metal object or and object with metal in it to increase the sensor area of detection.

## Applications

- Alarm systems
- Proximity sensors
- Interactive art

## Technical Specifications

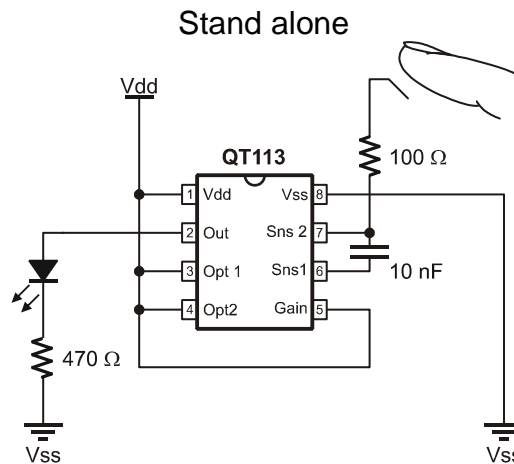
- Voltage requirements 5vdc
- Rated Current 600  $\mu$ A
- Output pin current 20 mA

## Output modes

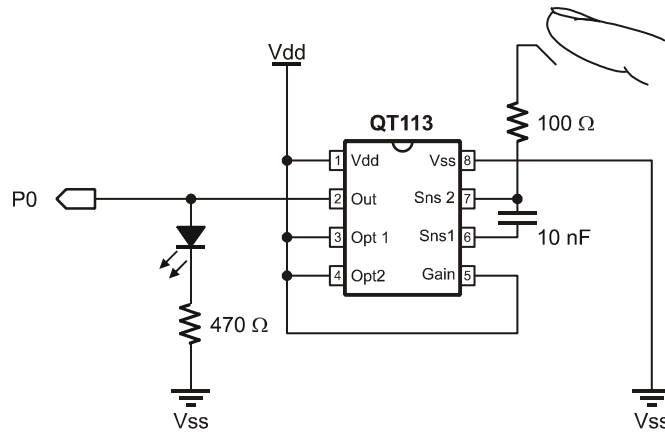
	Tie pin 3 to:	Tie pin 4 to:	Max on- Duration
DC Out	Vdd	Vdd	10 seconds
DC Out	Vdd	Gnd	60 seconds
Toggle	Gnd	Gnd	10 seconds
DC Out	Gnd	Vdd	Infinite

## Connections

The connections below will show how to setup the sensor in stand alone mode and using the BASIC Stamp<sup>®</sup> 2 microcontroller.



## To BASIC Stamp®



### BASIC Stamp® 2 code

```
' {$STAMP BS2}
' =====
' {$PBASIC 2.5}
'
' File..... QT113.BS2
' Purpose... Interface to QT113
' Author.... Parallax
' E-mail.... support@parallax.com
' Updated... 28 sept 2004
'
' =====
'
' Program Description
' -----
' This program demonstrates the QT113
' -----
' Revision History
' -----
' I/O Definitions
' -----
QT113_out  PIN  0' Output from QT113
' -----
' Variables
' -----
Trigger  VAR Bit
' -----
' Program Code
' -----
DO
  Trigger = QT113_out          'places reading in to variable
  DEBUG 1,"QT113 = ",BIN trigger 'display output
LOOP
```

## Resources

Datasheet can also be found at <http://www.gprox.com/>