**COMPONENT SPECIFICATIONS**

**Note:** The specifications shown in here are given by the manufacturers.

1. **ATTiny 25/45/85**

* High performance, low power AVR® 8-bit microcontroller
* Advanced RISC architecture
* 120 powerful instructions – most single clock cycle execution
* 32 × 8 general purpose working registers
* Fully static operation
* Non-volatile program and data memories
* 2/4/8Kbyte of in-system programmable program memory flash (ATtiny25/45/85)
* Endurance: 10,000 write/erase cycles
* 128/256/512 bytes in-system programmable EEPROM (Atmel® ATtiny25/45/85)
* Endurance: 100,000 write/erase cycles
* 128/256/512 bytes internal SRAM (ATtiny25/45/85)
* Programming lock for self-programming flash program and EEPROM data security
* 8-bit Timer/Counter with prescaler and Two PWM channels
* 8-bit high speed Timer/Counter with separate prescaler
* 2 High frequency PWM outputs with separate output compare registers
* Programmable dead time generator
* Universal serial interface with start condition detector
* 10-bit ADC
* 4 Single ended channels
* 2 Differential ADC channel pairs with programmable gain (1x, 20x)
* Programmable watchdog timer with separate on-chip oscillator
* On-chip analog comparator
* Special microcontroller features
* debugWIRE on-chip debug system
* In-system programmable via SPI port
* External and internal interrupt sources
* Low power idle, ADC noise reduction, and power-down modes
* Enhanced power-on reset circuit
* Programmable brown-out detection circuit
* Internal calibrated oscillator
* Six programmable I/O lines
* 8-pin SOIC
* 2.7 – 5.5V for Atmel® ATtiny25/45/85
* ATtiny25/45/85: 0 to 8MHz at 2.7 to 5.5V, 0 – 16MHz at 4.5 to 5.5V
* Automotive temperature range
* –40°C to +125°C
* Low Power Consumption
* 1MHz, 2.7V: 300µA
* 0.2µA at 2.7V

1. **35mm Piezo Buzzer**

* No need of Internal/External Driving Circuit
* 30Volts p-p max
* 35mm (diameter) x 0.5mm (thickness)
* Operating Frequency: 20Hz to 20Khz

1. **SS14 Schottky Diode**

Features:

* + For surface mounted application
  + Metal to silicon rectifier, majority carrier conduction
  + Low forward voltage drop
  + Easy pick and place
  + High surge current capability
  + Epitaxial construction
  + High temperature soldering : 250°C / 10 seconds at terminals
  + Operating Temperature: -64 to +125 °C
  + Forward Bias Voltage Drop: 0.3V