

ACS Sep-29-2004

### **BTI2 Electrical Specifications**

## **Absolute Maximum Ratings**

Ambient temperature range:  $+5^{\circ} \sim +50^{\circ}$  C Storage temperature range:  $-5^{\circ} \sim +55^{\circ}$  C

Voltage on Vcc with respect to GND:  $-0.3 \sim +6.5$ V

Voltage on Reset, Tx, Rx with respect to GND:  $-0.3 \sim (Vcc+0.3)$ 

Voltage on Vpmp with respect to GND: +7.2V

#### **Serial Communication**

TTL level, 9600, N, 8, 1

#### **Alcohol Measurement**

Fuel cell:

Operating life: 1 year (minimum)

Specificity: specific for alcohol, no cross

Sensitivity to ketones or hydrocarbons

Range: 0~255 mg% BAC Resolution: 1mg% BAC

Accuracy: +/-5 mg% BAC for solution < 50 mg% BAC

+/-10% for solution >= 50 mg% BAC

Analyzing time: < 6 seconds at 100 mg% BAC Purging time: < 60 seconds at 100 mg% BAC

Warm-up time: 2 minutes (maximum)

#### **Alcohol Calibration**

Solution: 50 mg% BAC

# **Power Supply**

Total power dissipation: Vcc -- 400mW (maximum)

Vpmp -- 20W (maximum)

Maximum current Icc: 100mA Maximum current Ipmp: 3A

Nominal Vcc: +5V/100mA with 750mA fuse

Nominal Vpmp: +5V/3A (recommended) with 5A fuse