

**Independence™****SEALED RECHARGEABLE LEAD-ACID****B A T T E R I E S**

**YUASA**  
 Power/Full Solutions™
**NP2-12****12V, 2Ah****Specifications****NOMINAL VOLTAGE:** 12V**NOMINAL CAPACITY:**

- 20 hr. rate of 100 ma to 10.50V 2.0Ah
- 10 hr. rate of 186 ma to 10.50V 1.86Ah
- 5 hr. rate of 340 ma to 10.20V 1.7Ah
- 1 hr. rate of 1200 ma to 9.60V 1.2Ah

**WEIGHT (approx.):** 1.54 pounds (0.70 kgs.)**ENERGY DENSITY (20 hr. rate):**

1.56 WH/cubic inch (95 WH/liter)

**SPECIFIC ENERGY (20 hr. rate):**

15.6 WH/pound (34 WH/kg)

**INTERNAL RESISTANCE OF CHARGE:**

80 milliohms (approx.)

**MAXIMUM DISCHARGE CURRENT WITH STANDARD TERMINALS:**

40 amperes

**MAXIMUM SHORT-DURATION DISCHARGE CURRENT:**

80 amperes

**OPERATING TEMPERATURE RANGE:****CHARGE** 5°F to 122°F

(-15°C to 50°C)

**DISCHARGE** -4°F to 140°F

(-20°C to 60°C)

**CHARGE RETENTION (shelf life) at 68°F (20°C):****1 month** 97%**3 months** 91%**6 months** 85%**LIFE EXPECTANCY:****STANDBY USE** 3 to 5 years**CYCLE USE (approx.)****100% depth of discharge** 250 cycles**50% depth of discharge** 550 cycles**30% depth of discharge** 1200 cycles**SEALED CONSTRUCTION:**

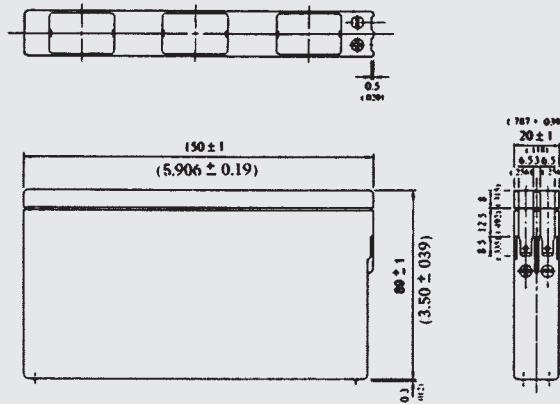
Can be operated in any position without leakage.

**STANDARD TERMINAL:**

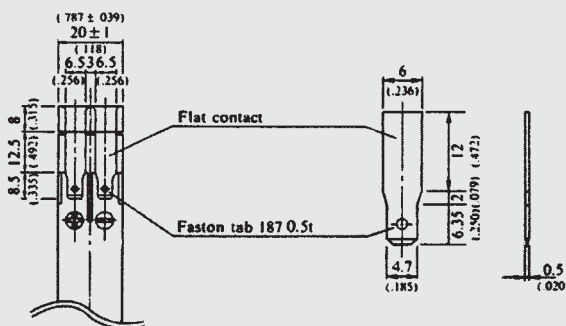
Quick disconnect .187 and Flat Contact

**HOUSING MATERIAL:**

ABS Resin

**DIMENSIONS**

DIMENSIONS: MM (INCHES)

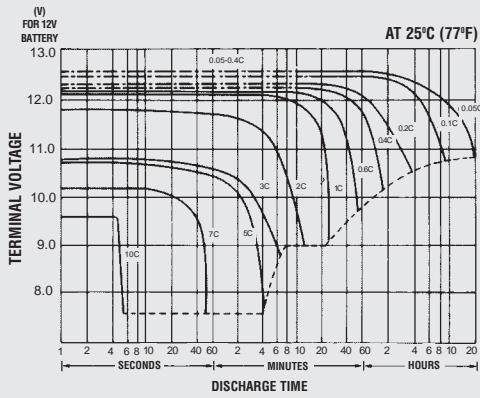
**TERMINAL**

DIMENSIONS: (INCHES)

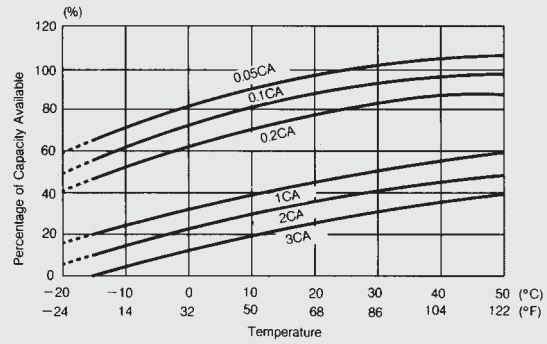


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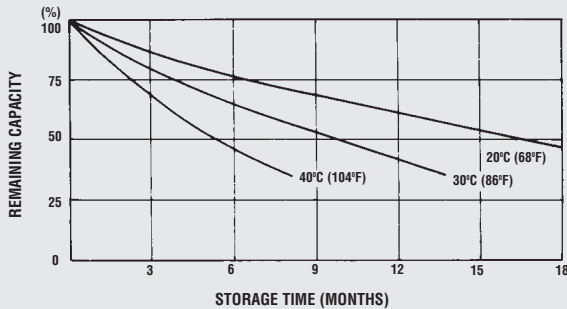
### DISCHARGE CHARACTERISTIC CURVES



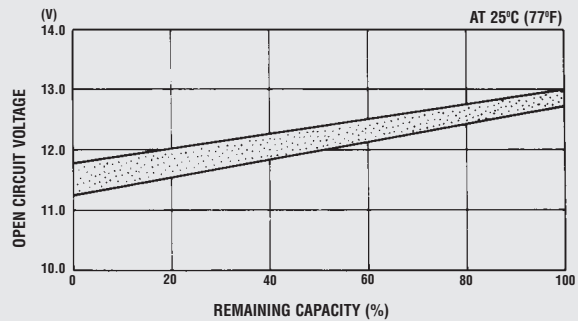
### TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



### SELF DISCHARGE CHARACTERISTICS

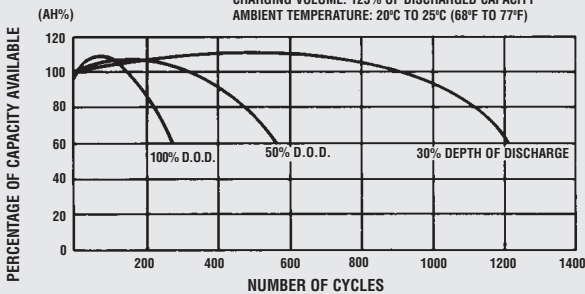


### OPEN CIRCUIT VOLTAGE VS REMAINING CAPACITY



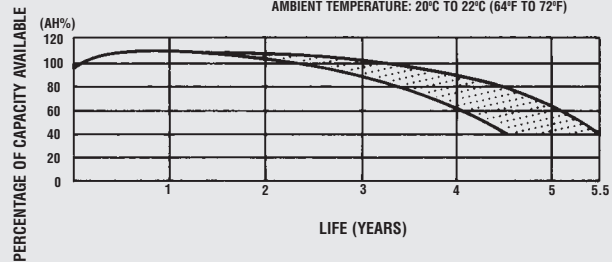
### CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

TESTING CONDITIONS: DISCHARGE CURRENT: 0.17C AMP. (F.V. 1.7V/CELL)  
 CHARGING CURRENT: 0.09C AMP.  
 CHARGING VOLUME: 125% OF DISCHARGED CAPACITY  
 AMBIENT TEMPERATURE: 20°C TO 25°C (68°F TO 77°F)



### FLOAT SERVICE LIFE

TESTING CONDITIONS: FLOATING VOLTAGE 2.25 TO 2.30V/CELL  
 AMBIENT TEMPERATURE: 20°C TO 22°C (64°F TO 72°F)



When the battery will be used by the current in excess of 3C, consult with Yuasa, Inc. prior to use.

#### CHARGING METHODS (At 20°C)

#### Cycle use:

Maximum charging current 0.5A

Charging voltage 14.4 to 15.0V

#### Standby use:

Float charging voltage 13.50 to 13.80V

#### CAUTION

- Avoid short circuit
- Do not charge in a sealed container.

Represented by:

When ordering new batteries, also remember to properly recycle your old lead batteries. Federal and state regulations require lead-acid batteries be recycled. Yuasa's nationwide service organization can arrange pickup, transportation to and recycling at any one of our company affiliated smelters. Call 1-800-972-7372 for more information.



Power/Full Solutions™

#### Sales Offices

Eastern Region: 201-964-0118 • 1-800-962-1287  
 FAX 201-964-0720

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