

#### **Product Data**

### Model R15703 Li-ion D Cell

#### **Electrical Characteristics**

Nominal Voltage 3.70V **Rated Capacity** 5.2Ah

#### **Physical Characteristics**

Height  $2.374 \pm .008$  in (60.3  $\pm 0.2$ mm) Diameter  $1.335 \pm .004 \text{ in } (33.9 \pm 0.1 \text{mm})$ 

Weight (nominal)

#### **Operating Characteristics**

Discharge Temperature Range -40°F to +158°F (-40°C to +70°C)

Max. Continuous Discharge Current 8.0A End (of discharge) Voltage 2.5V

**Charging Method** Current limited and voltage limited Charge Temperature Range 32°F to +122°F (0°C to +50°C)

Max. Recommended Charge Current 1.7A End (of charge) Voltage 4.2V ±0.05V

#### **Safety and Abuse Testing**

This product has undergone extensive safety and abuse testing to ensure rigorous standards of safety and security for the user.

Continuous Charge **Short Circuit** Shock Forced Discharge Vibration Overcharge High Temperature Storage Internal Short-circuit Thermal Shock

High Rate Charge

Altitude Simulation Free Fall

#### **Transportation Testing**

The R15703 has been tested and meets the requirements of UN Recommendations on the Transport of Dangerous Goods - Manual of Tests and Criteria, Fourth Revised Edition, Section 38.3.

This model is classified as Class 9, Dangerous Goods for transportation purposes per the UN Recommendations on the Transport of Dangerous Goods -Model Regulations, Thirteenth Revised Edition. This model must be packaged, labeled, and documented according to country and international regulations for transportation.

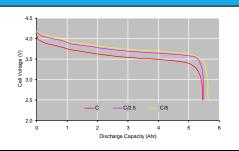


# R15703 Li-ion Cell Cell Performance Characteristics

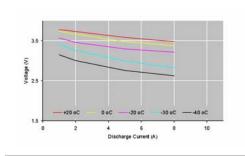
#### **Product Benefits:**

- High energy density up to three times that of NiCd cells
- High running voltage replaces three NiCd or NiMH cells
- Excellent low temperature performance will operate down to -40°C and below
- Simple charging methods combination of constant current and constant voltage
- No memory effects unlike NiCd cells no need for conditioning cycles after shallow discharges
- Proven cycle life extended cycle life throughout operational environment
- Environmentally
   Friendly
   contains no cadmium
   or lead

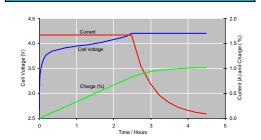
### Discharge Capacity vs Current Drain *Discharge at +20°C*



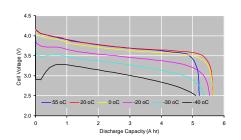
# Voltage vs Current & Temperature Avg. discharge voltage



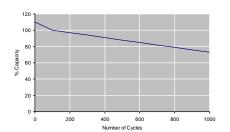
### Charging Method CCCV Charging



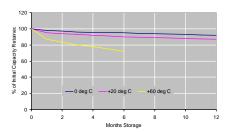
# Discharge Capacity vs Temperature Discharge at C/2.5 rate



# Cycle Life\* Discharge at C/2.5 rate at +20°C charge at C/3 rate



### Charge Retention *Discharge at C/2.5 rate*



<sup>\*</sup> Cycle life will vary with charge rate, discharge rate, depth of discharge and operating temperature, consult Electrochem for details.