

High Temperature Cell



## Lithium Battery Professional



ISO 9001:2000  
KSA 9001:2001

### Characteristics

- 3.9V "DD" Size Lithium Sulfuryl Chloride Cell (Li-SOCl<sub>2</sub>)
- High Rate Capability
- High Capacity
- 100°C Operational Temperature

# Lithium Sulfuryl Chloride Cell

MODEL: SC-DD01

PN: 34-111-H100

### Key Features

- 304L stainless steel structure
- Non-bulge design
- Hermetic glass-to-metal seal engineered for leak free operation
- Integral safety fuse and parallel diode to protect from short circuits and guarantee continued pack operation
- Electrode Surface Area, 441cm<sup>2</sup> of common surface area: high rate capability & lower self-discharge
- Gallium Based Electrolyte for improved performance

### Benefits

- 20% Higher Wh capacity than competitive product
- High rate capability for high constant current and pulse applications
- Automated assembly for uniform performance
- Certified shock and vibration testing to ensure trouble free operation under severe conditions in process
- Competitive price

### Technical Support

- We pledge our full support to provide you with the service you deserve
- Application Analysis
- Testing and Test Reports
- Analysis of field problems and reports
- Engineering support for custom applications

### Abuse and Transport Certifications

- UN/DOT Certified : Class 9 Transport, UN3090 Lithium Metal Batteries
- Shock Testing : To be determined
- Vibration Testing : To be determined

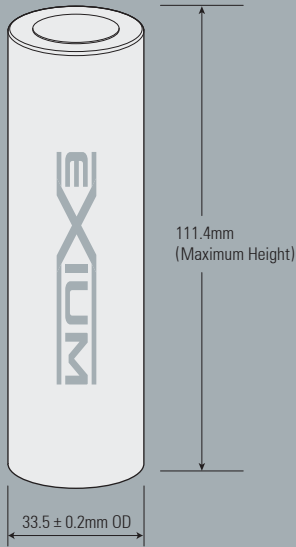
### Cell Characteristics

Nominal Capacity <small>-10°C - 100°C</small>	27Ah-32Ah
Open Circuit Voltage Nominal <small>At 20°C</small>	3.91V
Nominal Closed Circuit Voltage <small>Based on stable CCV produced at 25°C under a 600mA load. The CCV of a cell will decay slightly over discharge due to the normal increase in internal impedance. CCV will also increase with operational temperature.</small>	3.5V
Pulse Discharge Capability	6A <small>6 Amp pulse discharge of 0.1sec. duration once every 2 minutes at ≥ 75°C will maintain &gt; 3.0V. Contact Exium to determine the effect of higher currents, longer duration pulses, or lower temperatures. In some cases a capacitor may be required to maintain the desired voltage.</small>
Constant Current Discharge Maximum Constant Current Rate	1000mA(max capacity) 4000mA(reduced capacity)
Storage Conditions	30°C (86°F) Max
Operational Temperature Range <small>Note full capacity is obtained at temperatures of 25°C and above. Below 25°C both the rate capability and the capacity of the cell are reduced.</small>	-20°C to 100°C
Fuse Parallel Diode	7.0A Littlefuse PICO II 251 Series 8.0A On Semi MBRD835L-D

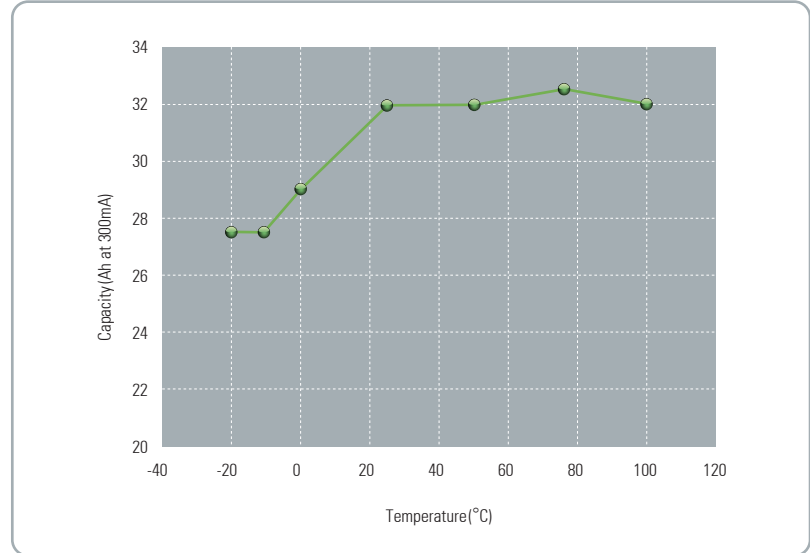
### Physical Characteristics

Diameter	33.50mm(1.32in)
Height	111.9mm max.(4.40in)
Weight	213±1g
Lithium Metal Content	9.6g

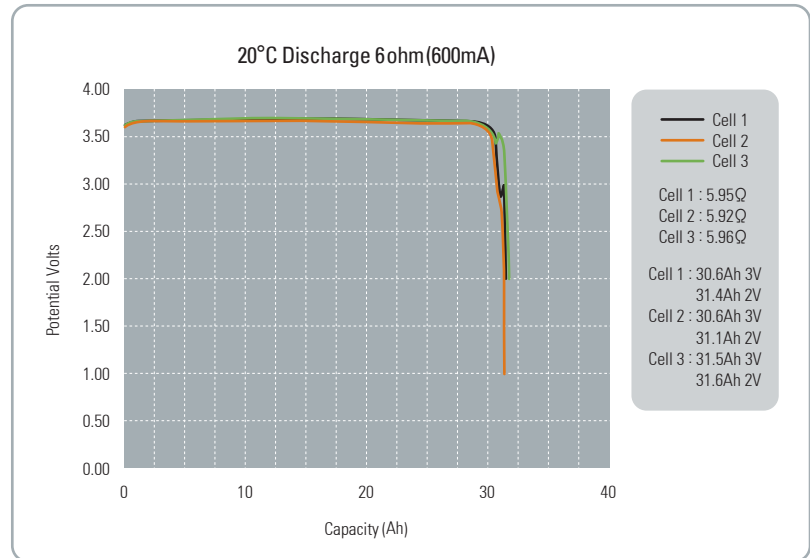
## External Dimensions



## Capacity vs. Temperature Exium PIG Cell



## Exium 34-111-H100 PIG Cell Lot 121311



## Exium Technologies, Inc.

84 Broadway Suite #2  
Taunton, MA 02780  
Tel: +1-508-824-0015  
Fax: +1-508-824-0101  
Mobile: +1-781-389-8342  
Email: sriley@exiumtechnologies.com  
Web: www.exiumtechnologies.com

## VITZROCELL Co., Ltd.

**Head Office & Factory**  
256-41, Dugok-li, Shinam-myon, Yesan-gun,  
Chungcheongnam-do 340-860, Korea  
Tel: +82-41-332-8642  
Fax: +82-41-332-8646

**Seoul Office**  
VITZROCELL Bldg, 27-16, Gunja-dong,  
Gwangjin-gu, Seoul 143-837, Korea  
Tel: +82-2-2024-3252  
Fax: +82-2-499-2756  
Email: sales@vitzrocell.com  
Web: www.vitzrocell.com

## Storage

- Store cells in a cool (<30°C) and dry location

## Warning

- Contents of this hermetically sealed cell are water reactive and will produce flammable and toxic gases if exposed to water.
- Fire, explosion and severe burn hazard. Do not recharge, crush, disassemble, heat, above 212°F(100°C), incinerate, short circuit or expose contents to water. Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly.

## Note

- Any information given here is for reference only. Information is also dependent on actual conditions of use and does not guaranty future performance. And subject to change.