# **Primary lithium batteries** G 06/2

3.0 V Primary lithium-sulfur dioxide (Li-SO<sub>2</sub>) High drain capability AA-size spiral cell



**R6 - AA** 

# **Benefits**

- High and stable discharge voltage
- High pulse capability
- Performance not affected by cell orientation
- Long storage possible before use
- Ability to withstand extreme temperature

# **Key features**

- Low self-discharge rate (less than 3% after 1 year of storage at +20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent (at the negative end of the cell)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in UK

# **Main applications**

- Radiocommunications and other military applications
- Respirators
- Memory back-up
- Professional electronics

**Electrical characteristics** (typical values relative to cells stored for one year or less at +30°C max.) 0.95 Ah Nominal capacity (at 80 mA +  $20^{\circ}$ C 2.0 V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off) Open circuit voltage (at + 20°C) 3.0 V Nominal voltage (at 0.06 A +20°C) 2.8 V Continuous current permitting 50% of the nominal capacity to be achieved at +20°C with 2.0 V cut off. 0.5 A Pulse capability : Typically up to 0.8 A. (The voltage readings may vary according to the pulse characteristics, the temperature and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions. Consult Saft)

| Storage  | (recommended)<br>(possible without leakage) | +30°C (+86°F) max<br>+85°C (+185°F) max |
|--|---|---|
| Operating temperature range<br>(Operation above ambient T may lead to reduced capacity and lower<br>voltage readings at the beginning of pulses. Consult Saft) |   | -60°C/+70°C<br>(-76°F/+158°F)           |

# **Physical characteristics**

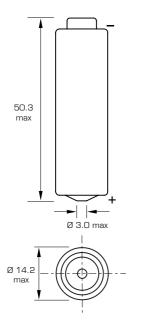
**Cell size reference** 

| Diameter (max)        | 14.2 mm (0.56 in) |
|-----------------------|-------------------|
| Height ( <i>max</i> ) | 50.3 mm (1.98 in) |
| Typical weight        | 15 g (O.53 oz)    |
| Li metal content      | 0.4 g             |

Standard cell comes with protruding positive end-cap. Finish with tabs available on request



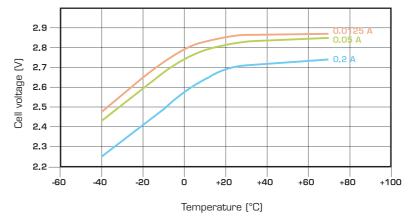
# G 06/2



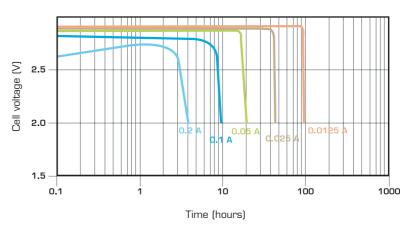
Overall dimensions in mm

# **Handling precautions**

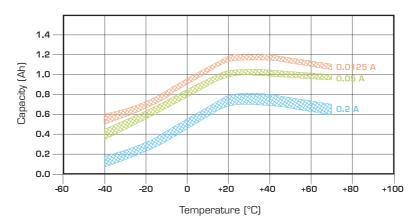
- · Cell is pressurised.
- Do not puncture, open or mutilate.
- Do not obstruct the safety vent mechanism.
- Do not short circuit or charge.
- Do not expose to fire or temperatures above +70°C (+158°F).



Voltage at mid-discharge versus Current and Temperature (2.0 V cut-off)



Typical discharge profiles at +20°C



Capacity versus Current and Temperature (continuous discharges 2.0 V cut-off)

# Saft

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