

Primary lithium battery

G 52/3

3.0 V Primary lithium-sulfur dioxide (Li-SO₂)

High drain capability

C-size spiral cell



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 2 % after 1 year of storage at +20°C)
- Hermetic glass-to-metal sealing
- Built-in safety vent
(at the negative end of the cell)
- Restricted for transport (class 9)
- Meets shock, vibration and other environmental requirements of military specifications
- Made in UK

Main applications

- Radiocommunications and other military applications
- Sonobuoys
- Life jacket lights
- Professional electronics
- Rescue devices

Cell size reference

R14 - C

Electrical characteristics

(typical values relative to cells stored for one year or less at +30°C max.)

Nominal capacity 3.2 Ah

(at 1.0 A +20°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 0.5 A +20°C) 2.8 V

Nominal energy 8.96 Wh

Maximum recommended continuous current 2.5 A
(to avoid over-heating)

Pulse capability: Typically up to 5 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) +30°C (+86°F) max
(possible without leakage) +85°C (+185°F) max

Operating temperature range -60°C/+70°C
(Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft)
(-76°F/+158°F)

Physical characteristics

Diameter (max) 25.6 mm (1.01 in)

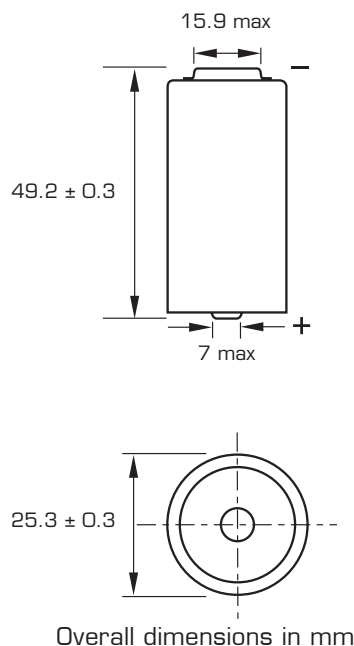
Height (max) 49.5 mm (1.95 in)

Typical weight 47 g (1.6 oz)

Li metal content 1.2 g

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

G 52/3



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 $+70^{\circ}\text{C}$ ($+158^{\circ}\text{F}$).

Saft

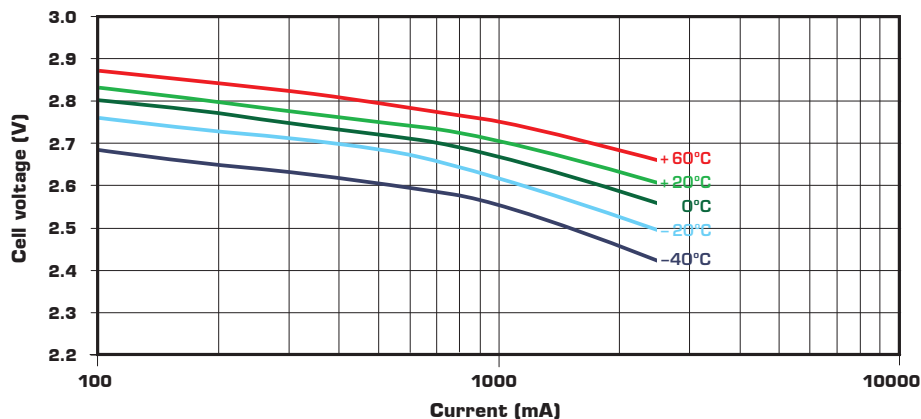
Specialty Battery Group

12, rue Sadi Carnot
93170 Bagnole - France
Tel.: +33 (0)1 49 93 19 18
Fax: +33 (0)1 49 93 19 69

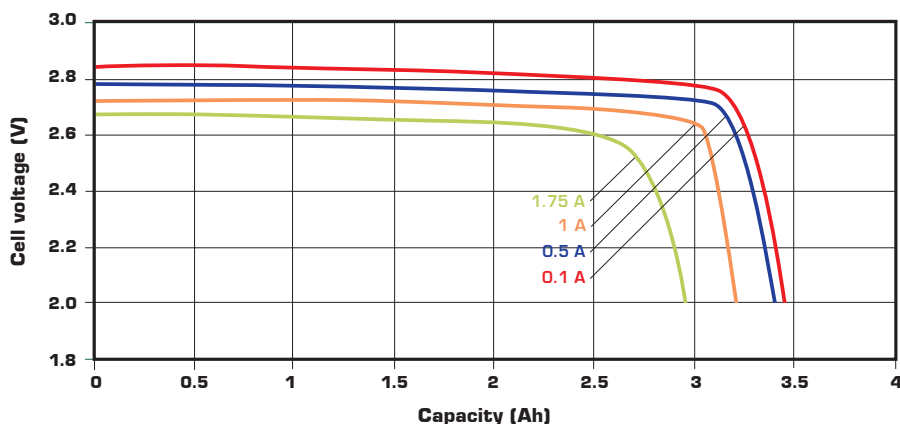
River Drive, South Shields
Tyne and Wear, NE33 2TR - UK
Tel.: +44 (0)191 456 1451
Fax: +44 (0)191 456 6383

www.saftbatteries.com

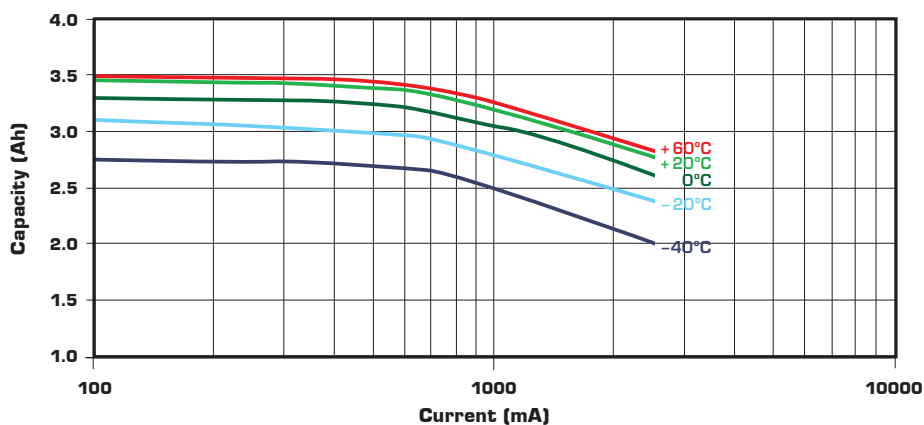
Voltage at mid-discharge versus Current and Temperature (2.0 V cut-off)



Typical discharge profiles at $+20^{\circ}\text{C}$



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



Doc. N° 31092-2-1208

Information in this document is subject to change without notice and becomes contractual only after written confirmation by Saft.

For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc N° 31048-2.

Published by the Communications Department.

Photo credit: Saft.

Société anonyme au capital de 31 944 000 €
RCS Bobigny B 383 703 873

Produced by Arthur Associates Limited.



SAFT