

Safe-Plus **MODEL ER18505SP**
Lithium Thionyl Chloride
(Li-SOCl₂) Battery

(International size reference: A, ER18505M/SP)

PCB and PTC double protection

Over discharge, short circuit and forced charge protection

High drain/high pulse applications

ELECTRICAL CHARACTERISTICS

(typical values for cells stored for one year or less, 25°C)

■ **Nominal capacity** **3.4Ah**
(at 5.0 mA, +25°C, 2.5V cut off. The capacity restored by the cell varies according to current drain, temperature and cut off voltage.)

■ **Rated voltage** **3.6 V**

■ **Maximum recommended continuous current** **600 mA**
(Maximum continuous current permitting 50% of the nominal capacity to be achieved at +20°C with the 2.5V cut off.)
(Higher currents possible. Consult OmniCel.)

■ **Maximum pulse current capability** **1,500 mA**
1,500mA / 1 second pulses, drained every 10 seconds at +20°C from undischarged cells with 10 μ A base current, yield voltage reading above 3.0V.
Pulse capability varies according to pulse characteristics (frequency and duration), temperature, cell history (storage conditions prior to usage) and the application's acceptable minimum voltage.

■ **Storage** (recommended) **30°C max**
(possible without leakage) **-55° / +100°C**

■ **Operating temperature range** **-40° / +85°C**
(Operation at temperature different from ambient may lead to reduced capacity and lower voltage plateau readings.)

KEY FEATURES

- ✓ Instant voltage response
- ✓ High minimum voltage during pulsing
- ✓ Low self discharge rate (less than 2% after 1 year of storage at +25°C)
- ✓ Stainless steel container
- ✓ Hermetic glass-to-metal sealing
- ✓ Absolute safety protection
- ✓ Non-flammable electrolyte

MAIN APPLICATIONS

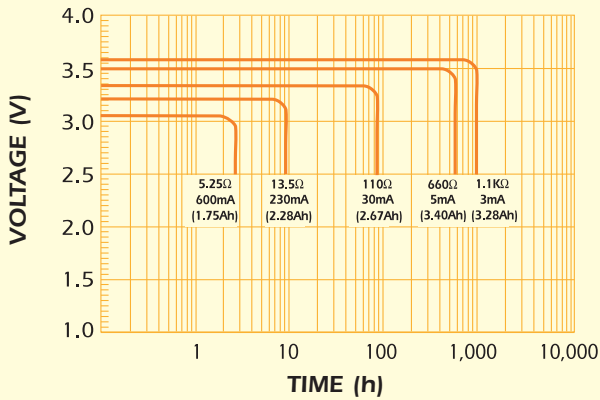
- ✓ Utility metering
- ✓ Military electronics
- ✓ Alarms and security devices
- ✓ Tracking systems
- ✓ Automotive electronics
- ✓ Professional electronics
... etc.

⚠ WARNING:

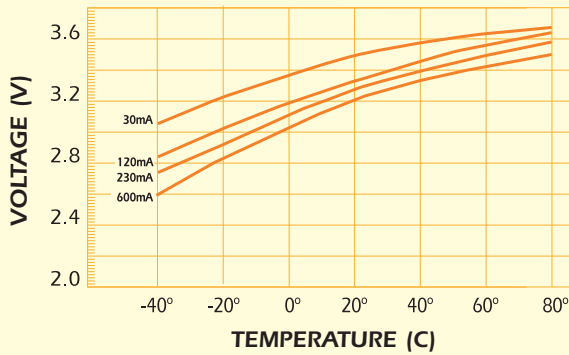
Fire, explosion and severe burn hazard. Do not recharge, crush, disassemble, heat above 212°F (100°C), incinerate, or expose contents to water.

Note: Any representations in this data sheet concerning performance are for informational purpose only and are not construed as warranties, either expressed or implied, of future performance.

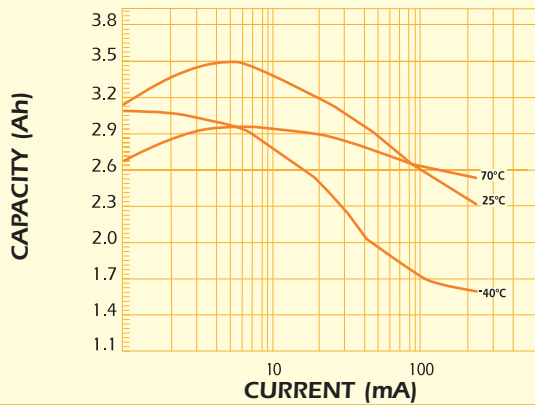
DISCHARGE CHARACTERISTICS @ +25°C



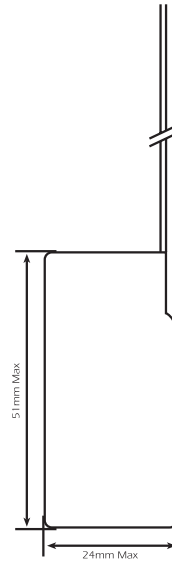
VOLTAGE VS. TEMPERATURE



CAPACITY VS. CURRENT



ER18505SP



AVAILABLE TERMINATIONS

Suffix - /W Wire Leads

PHYSICAL CHARACTERISTICS

- Diameter (max) 24 mm (0.945")
- Height (max) 51 mm (2.008")
- Typical weight 28 g (0.988 oz)

PULSE DISCHARGE CHARACTERISTICS

Pulse discharge: 1,500mA Temperature: 25°C

