



MODEL ER18505
Lithium Thionyl Chloride
(Li-SOCl₂) Battery

(International size reference: A, ER18505)

ELECTRICAL CHARACTERISTICS

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

■ **Nominal capacity** **3.80Ah**
 (at 3.0 mA +25°C 2.0V 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** **100 mA**
 (to get 50% of the Nominal capacity at +25°C with the 2.0V cut off. Higher currents possible. Consult OmniCel.)

■ **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.

■ **Maximum pulse current capability** **200 mA**
Rated 1 sec. pulse capability (to 3V) **50 mA**

■ **Storage** (recommended) **30°C max**
 (possible without leakage) **-55° / +120°C**

■ **Operating temperature range** **-55° / +85°C**
 (Operation at temperature different from ambient may lead to reduced capacity and lower voltage plateau readings.)

⚠ WARNING:

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

KEY FEATURES

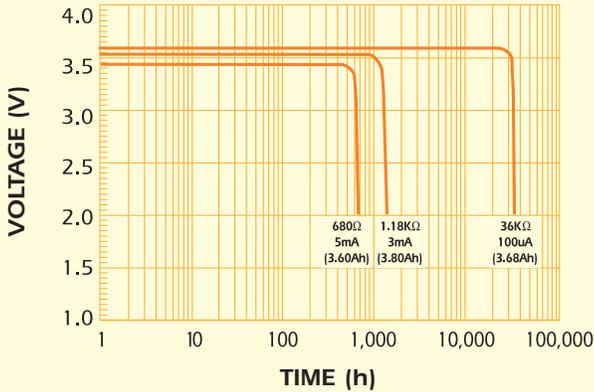
- ✓ High and stable operating voltage
- ✓ High minimum voltage during pulsing
- ✓ Low self discharge rate (less than 1% after 1 year of storage at +25°C)
- ✓ Stainless steel container
- ✓ Hermetic glass-to-metal sealing
- ✓ Non-flammable electrolyte
- ✓ Compliant with IEC 86-4 safety standard and EN 50020 intrinsic safety

⚠ Underwriters Laboratories (UL) Component Recognition (File Number MH 47566)

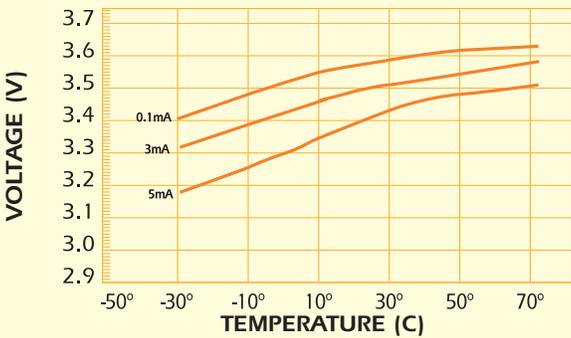
MAIN APPLICATIONS

- ✓ Utility metering
- ✓ Alarms and security devices
- ✓ Memory back-up
- ✓ Tracking systems
- ✓ Automotive electronics
- ✓ Professional electronics ... etc.

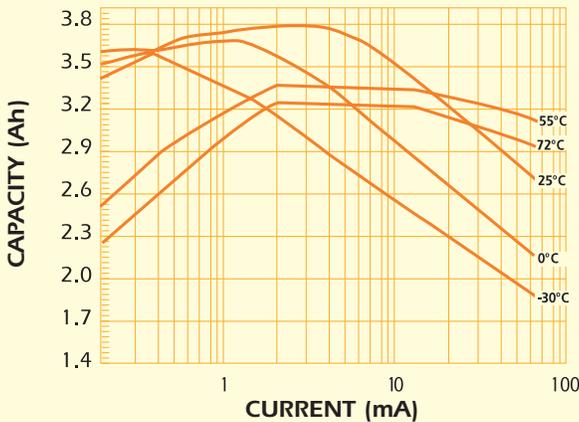
DISCHARGE CHARACTERISTICS @ +25°C



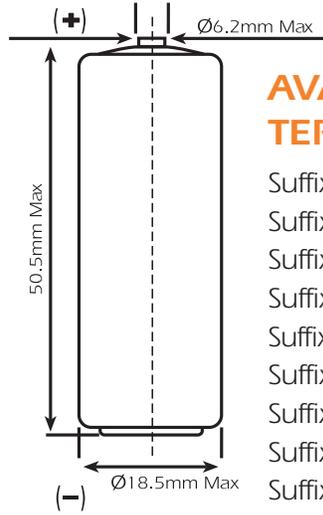
VOLTAGE VS. TEMPERATURE



CAPACITY VS. CURRENT



ER18505



AVAILABLE TERMINATIONS

Suffix -/S	Standard
Suffix -/T	Solder Tabs
Suffix -/P	Axial Pins
Suffix -/2PT	Polarized Tabs
Suffix -/3TP	Polarized Tabs
Suffix -/3PT	Polarized Tabs
Suffix -/3PF	Polarized Tabs
Suffix -/3FP	Polarized Tabs
Suffix -/4PF	Polarized Tabs
Suffix -/W	Wire Leads

[View available terminations](#)

PHYSICAL CHARACTERISTICS

Diameter (max)	18.5 mm (0.728")
Height (max)	50.5 mm (1.988")
Typical weight	28.0 g (0.988 oz)

STORAGE CHARACTERISTICS

