



MODEL ER18505HD
Lithium Thionyl Chloride
(Li-SOCl₂) Battery

(International size reference: A, ER18505M)

ELECTRICAL CHARACTERISTICS

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

■ **Nominal capacity** **3.50 Ah**
 (at 5.0 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** **600 mA**
 (Maximum continuous current permitting 50% of the nominal capacity to be achieved at +20°C with the 2.0V cut off.)
 (Higher currents possible. Consult OmniCel.)

■ **Maximum pulse current capability** **1,500 mA**
 1500mA / 1 second pulses, drained every 10 seconds at +20°C from undischarged cells with 10 μA 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.)

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

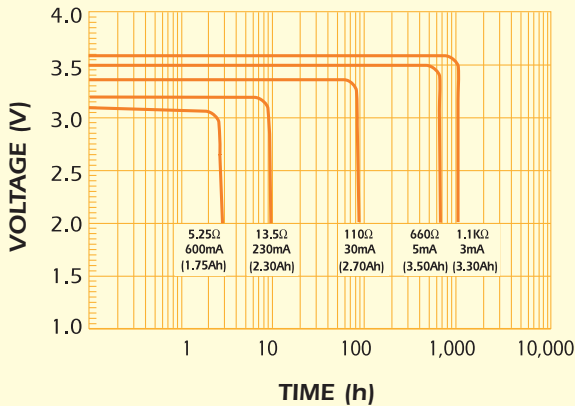
KEY FEATURES

- ✓ 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
- ✓ PTC over-current protection (3-5A)
- ✓ 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 28717)

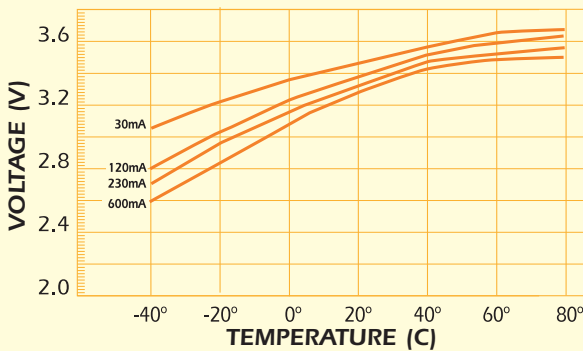
MAIN APPLICATIONS

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

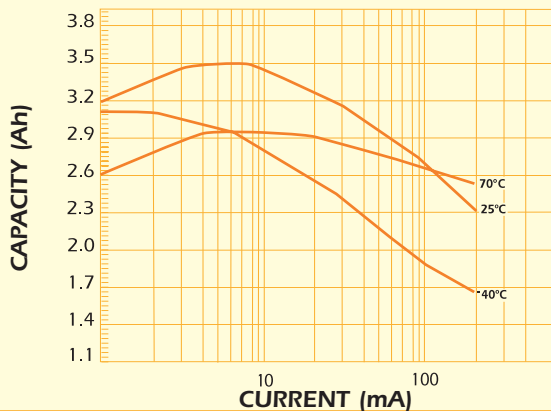
DISCHARGE CHARACTERISTICS @ +25°C



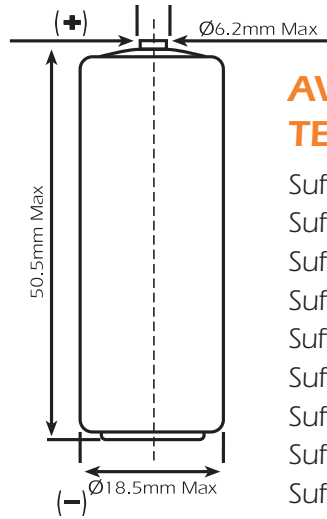
VOLTAGE VS. TEMPERATURE



CAPACITY VS. CURRENT



ER18505HD



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 (1.98")
■ Typical weight	28 g (0.988 oz)

PULSE DISCHARGE CHARACTERISTICS

