



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
 (To get 50% of the nominal capacity at +25°C with 2.0V cut off. Higher currents possible. Consult OmniCel.)

■ **Pulse capability:** Typically up to 1500mA (1500mA / 0.1second pulses, drained every 2 min at 25° C from undischarged cells with 10 µA base current, yield voltage readings above 3.0V. The readings may vary according to the pulse characteristics, the temperature, and the cell’s previous history. Fitting cell with a capacitor may be recommended in severe conditions. Consult OmniCel.)

■ **Storage** (recommended) 30°C max
 (for more severe condition consult OmniCel.)

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

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
- UL Underwriters Laboratories (UL) Component Recognition (File Number MH28717)

MAIN APPLICATIONS

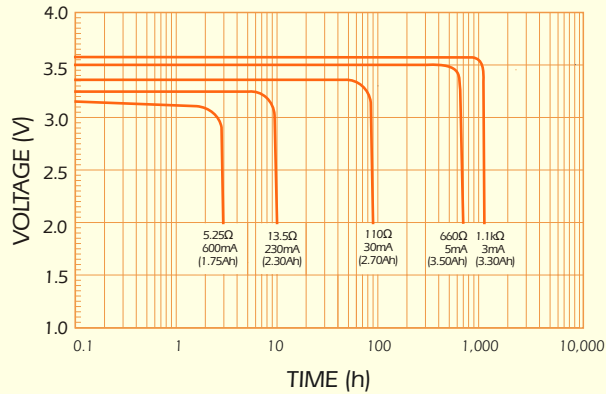
- ✓ Utility metering
- ✓ Military electronics
- ✓ Alarms and security devices
- ✓ Memory back-up
- ✓ Tracking systems
- ✓ Automotive electronics
- ✓ Professional electronics ... etc.

WARNING:

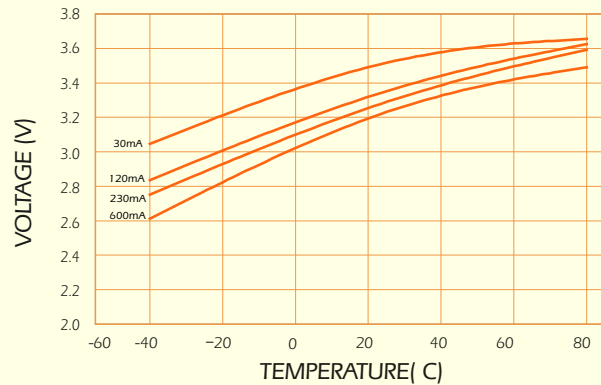
Fire, explosion and severe burn hazard. Do not recharge, crush, disassemble, heat above 212°F (100°C), incinerate, or expose contents to water.

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.

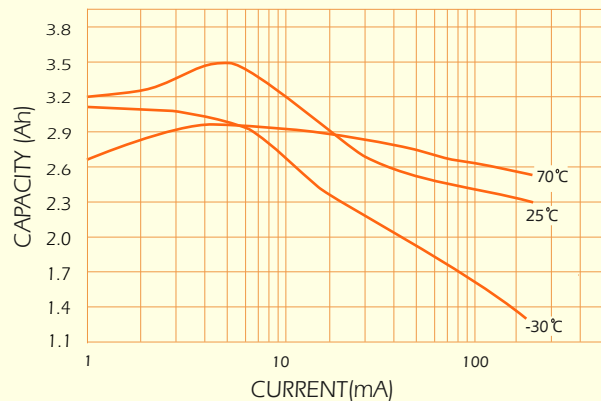
DISCHARGE CHARACTERISTICS @ + 25°C



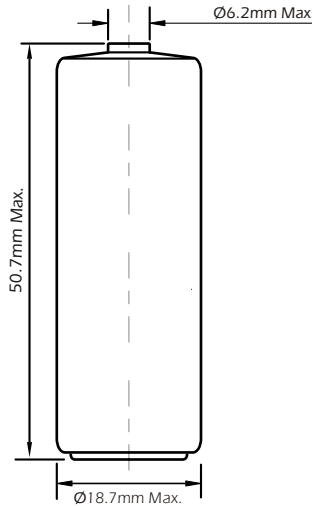
VOLTAGE VS. TEMPERATURE



CAPACITY VS. CURRENT



ER18505HD



AVAILABLE TERMINATIONS

Suffix-/S	Standard
Suffix-/T	Solder Tabs
Suffix-/W	Wire Leads

[View available terminations](#)

PHYSICAL CHARACTERISTICS

Diameter (max)	18.7 mm (0.589")
Height (max)	50.5 mm (1.98")
Typical weight	30 g (1.058oz)

PULSE DISCHARGE CHARACTERISTICS

