

Primary high temperature lithium battery

Safety enhanced high temperature batteries, optimized for oil and gas

ER21102MR-145

3.6V Moderate Rate Lithium thionyl chloride(Li/SOCl₂)

Slim CC-sized cell for operation up to 145°C in demanding environments



Key features

- Primary Cell(non-rechargeable)
- High voltage response,stable during most of the lifetime of the application
- Low self-discharge rate(less than 2% per year of storage at +20°C)
- Stainless steel container
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Built to withstand extreme shock and vibration
- Compliant with IEC 60086-4 safety standard
- Restricted for transport (class 9)

Main applications

- Downhole oil & gas
 - Measurement While Drilling
 - Logging While Drilling
- Pipeline inspection gauges
- Tracking systems
- Sensor systems

Electrical characteristics

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

Nominal capacity	10Ah
(At 1.8KΩ, +20°C, 2.0V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)	

Nominal voltage	3.6V
(At 0.1mA +20°C)	

Maximum recommended continuous current	400mA
(To get 50% of the nominal capacity at +20°C with 2.0V cut off. Higher currents possible, consult EVE)	

Storage (Recommended)	+30°C
(For more severe condition consult EVE)	

Operating temperature range	-40°C ~ +145°C
(Operation at temperature different from ambient may lead to reduced capacity and lower voltage plateau readings)	

Diameter (nominal)	21.0mm
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Height (nominal)	102.0mm
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Weight (nominal)	80g
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Lithium Weight	2.6g
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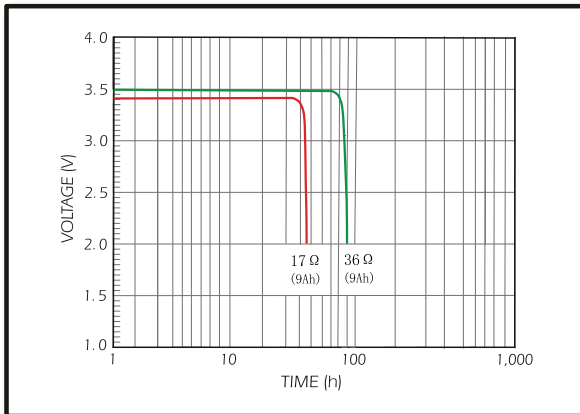
Storage

- The storage area should be clean, cool (preferably not exceeding +30°C), dry (Relative humidity not exceeding 70%) and ventilated.

Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 145°C, incinerate, or expose contents to water.
- Do not solder directly to the cell, use tabbed cell versions instead.

1 Discharge characteristics at +145°C

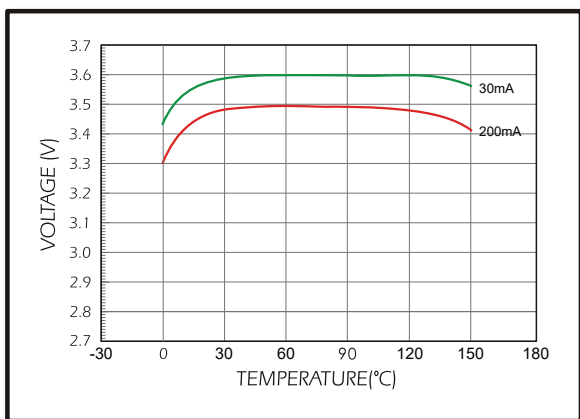


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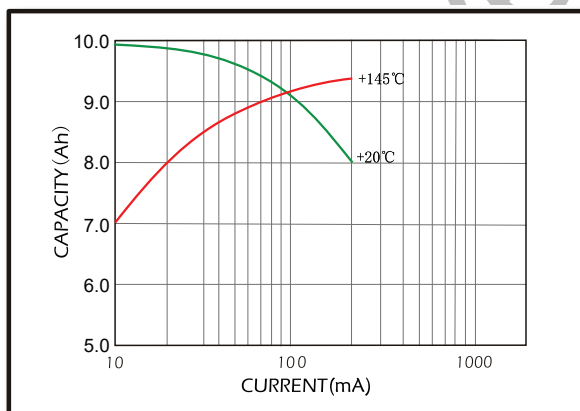


Dimensions in mm
(for more terminations, consult EVE)

2 Voltage VS Temperature



3 Capacity VS Current



4 Storage characteristics

