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LM 33600

Primary Li-MnO_2 cell

3 V lithium manganese dioxide D-size spiral cell

Saft's LM 33600 cell is ideally suited for applications requiring high energy and long operating life, with stable voltage under high discharge rates in –40°C / +85°C environment.



Benefits

- High drain/ high pulse capability
- High voltage response, stable during most of the lifetime of the application even after long dormant periods
- High capacity at high current and low temperature
- Low self discharge compatible with long operating life (less than 1% after 1 year of storage at +20°C)
- Superior resistance to corrosion
- Low magnetic signature

Key features

- Spiral construction
- Hermetic construction with glass to metal seal
- Stainless steel container
- Integrated safety vent
- Non corrosive electrolyte
- Non pressurized at room temperature
- Restricted for transport (Class 9)
- RoHS and REACH compliant
- Made in USA

Designed to meet all major quality, safety and environment standards

- Safety: UL 1642 and IEC 60086-4
- Transport: UN 3090 and UN 3091
- Quality: ISO 9001, Saft World Class Continuous program

Typical applications

- Utility metering
- Alarms and security
- GSM/GPRS communication
- Radio communications systems
- Medical devices
- IoT devices

Electrical characteristics[1]	
Nominal capacity (at 20 mA (160 Ω), +20°C, 2.0V cut-off)[2]	13.4 Ah
Open circuit voltage (at +20°C)	3.2 V
Nominal voltage (under 1 mA, at +20°C)	3.0 V
Nominal energy (at 20 mA (160 Ω), +20°C, 2.0V cut-off)	37 Wh
Pulse capability [3]	Up to 8.0 A
Maximum recommended continuous current	4.0 A
Operating conditions	
Operating temperature range[4]	-40°C to +85°C
Storage temperatures	
Recommended	+30°C max
Allowable[5]	-55°C to +85°C
Physical characteristics	
Diameter (max)	34.2 mm
Height (max)	61.55 mm
Typical weight	113 g
Li metal content	approx. 4.4 g
Termination suffix	
CNR	Radial tabs
3 PF, 3 PF RP, 4 PF	Radial pins
FL	Flying leads
Other configurations upon request	

[1] Typical values relative to cells stored up to one year at + 30°C max.
[2] Dependent upon current drain, temperature and cut-off.
[3] Dependent upon pulse characteristics, temperature, cell history and application. Higher rates are available under certain circumstances
[4] To maintain cell heating within safe limits. Battery packs may imply lower level of maximum current and may require specific thermal protection. Consult Saft.
[5] Long time storage at high temperature may affect performances. Consult Saft.

TotalEnergies

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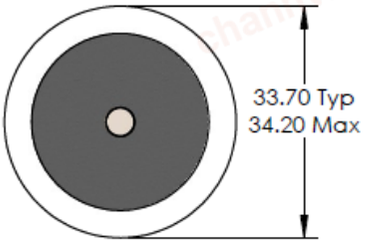
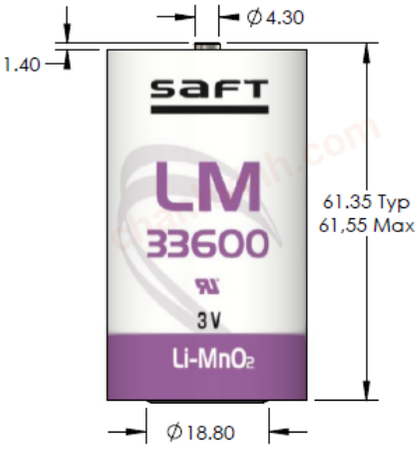




Dimensions in mm

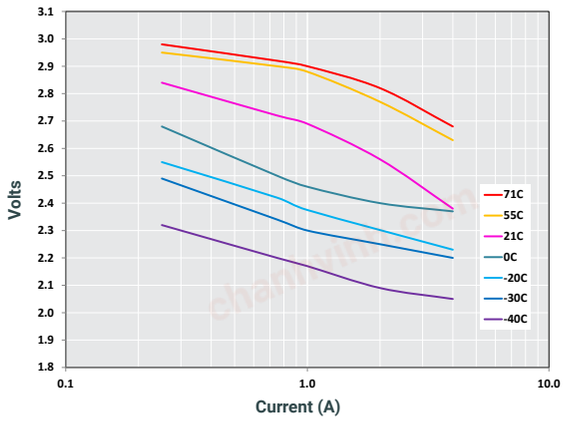
Storage

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

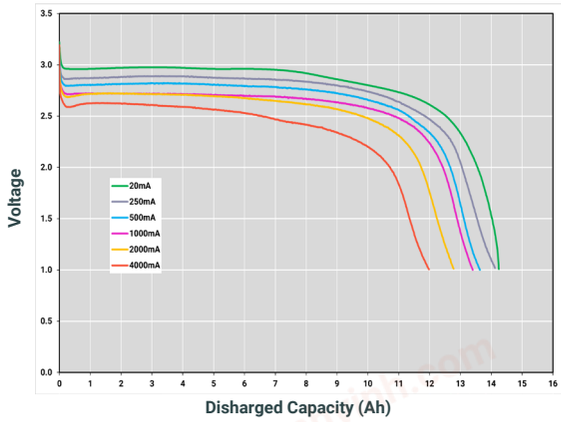
Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 85°C, incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).
- Do not obstruct venting mechanism.
- Minimum clearance 2 mm (0.08 in) at negative end of cell.

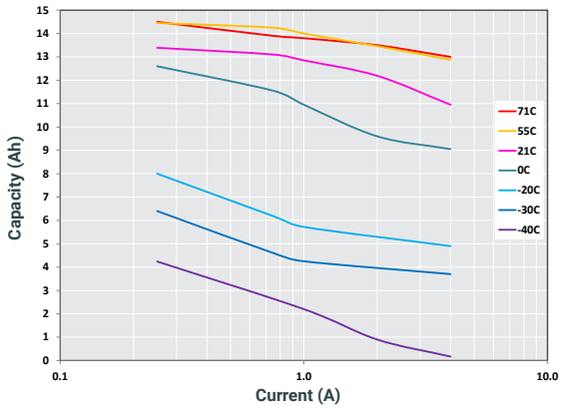
Voltage plateau vs. current and temperature (at mid-discharge)



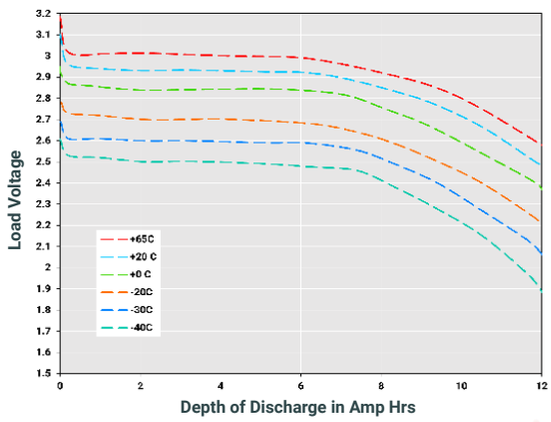
Typical discharge curves at 21°C at various discharge currents



Restored Capacity vs. Current and Temperature (2V cutoff)



Pulse Discharge Characterisitics (600mA, 400mS pulses)



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