

ARICELL Primary Lithium Cell

3.6V lithium thionyl chloride / Li-SOCl₂

Low rate series TCL-2/3AA

Size 2/3AA Bobbin structure



Scope

Low rate series is a suitable solution for applications requiring small current for long-term back-up. This data sheet describes the mechanical design and electrical performance of the TCL-2/3AA of low rate series.

Electrical Characteristics

* Typical values at room temperature(+20°C ~ +30°C) for cell stored for one year or less.

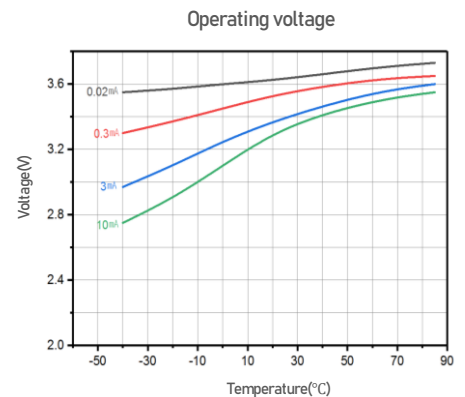
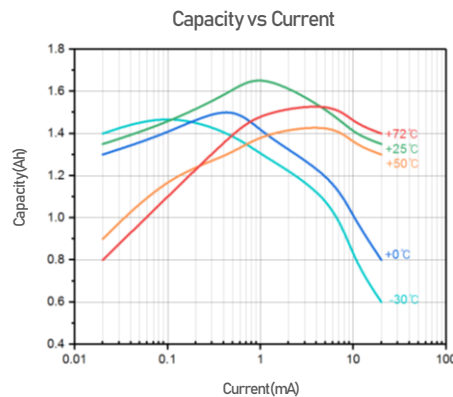
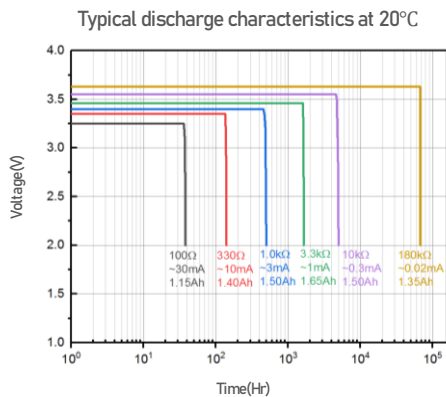
Nominal voltage(at +20°C)	3.6 V
Nominal capacity(at 1mA, +20°C, 2.0V cut off) <i>* The capacity restored by the cell varies according to current drain, temperature and cut-off.</i>	1.65 Ah
Maximum continuous discharge current <i>* The maximum continuous discharge current will provide more than 50% of its nominal capacity.</i>	40 mA
Pulse capability <i>* Under 90mA/0.1 second pulses, drained every 2 minutes at +20°C during 24 hours, from undischarged cells, with 10µA base current, yield voltage readings above 3.0V after initial stabilization. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions or for high pulse currents. Consult ARICELL.</i>	90 mA
Storage(recommended)	+25°C ± 5°C in dry condition
Operational temperature range	-55°C ~ +85°C

Physical Characteristics

Diameter(max)	14.5 mm
Height(max)	33.5 mm
Positive(+) pin diameter(max)	4.5 mm
Cell weight	12.0 g
Lithium metal content	Approx. 0.5 g
Available terminations	T1, T2, T3, T3R, AX, Wire, Connector

* Customized battery pack: Since cell assembly requires a lot of experience and technical skills, we do not recommend end-user attempts to self-assembly without technical information. Please consult ARICELL.

Performance



Benefits

- High and stable operating voltage
- Superior shelf life : Up to 15 years
- Wide operational temperature range : -55°C ~ +85°C
- Low self-discharge rate : Less than 1% per year at 20°C

Key features

- Bobbin structure
- 304L stainless steel container
- Hermetically glass to metal sealed
- Non-flammable electrolyte
- UL1642 certified: File no. MH 62104
- Compliant with IEC60086-4
- UN DOT 38.3
- Made in South Korea

Typical applications

- AMR utility metering
- Medical equipment
- RFID device
- Military System
- Toll tag
- Asset tracking

Warning

- Fire, explosion and burn hazard. Do not recharge, short circuit, crush, disassemble, heat above 100°C(212°F), incinerate. Do not solder directly to the cell (use tabbed cell versions instead).

※ Any values given here are for reference only. They also depend on actual conditions of use and does not guarantee future performance. Subject to change.