



Lithium ion cell for Aerospace applications LFC 40



Overview

The LFC40 Lithium ion Rechargeable cell is optimized for High Rate Applications which also require high energy density. The cell design is based on our state of the art technology and extensive experience in manufacturing cells for space applications and large-scale industrial batteries

Features

- High energy density
- Excellent discharge characteristics
- Sealed structure
- Low self-discharge
- Excellent performance in high shock environments

Applications

- Launch vehicles and other rockets
- Other high reliability applications

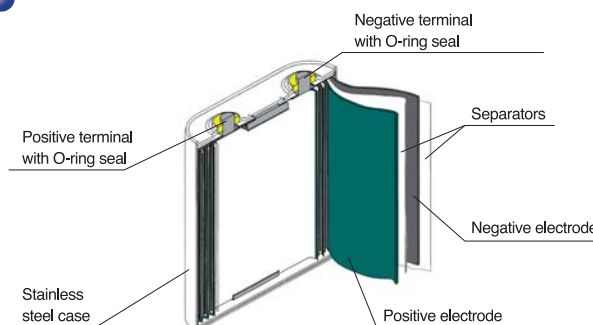
Cell specification

Nominal voltage (V)		3.7
Capacity (Ah)	Rated	40
	Nominal	44
Dimensions(mm)	Width	137
	Thickness	31
	Height	165
Weight (Kg)		1.6
Specific Energy (Wh/kg)		102
Energy Density (Wh/l)		244
Maximum charge rate(CA)		0.5
Maximum discharge rate(CA)		1.0 (pulse 3.0, 1.0sec)
Recommended temperature range	Charge	10°C~30°C
	Discharge	0°C~65°C
	Storage	-5°C~4°C
Maximum AC impedance at BOL		1.1mΩ

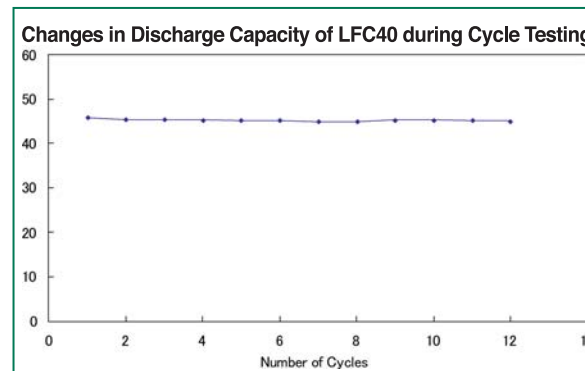
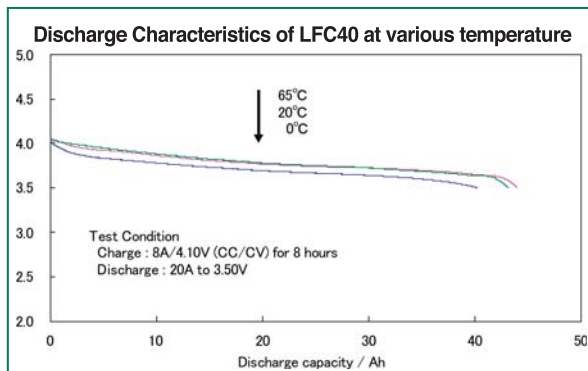
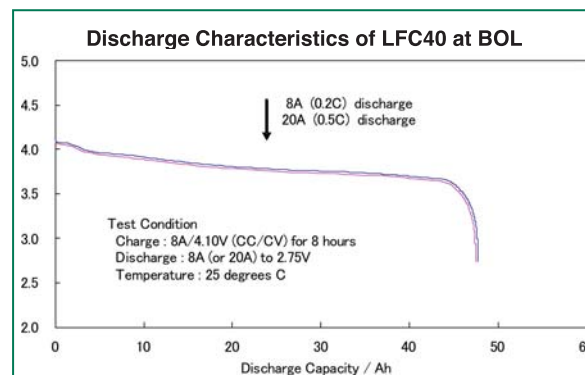
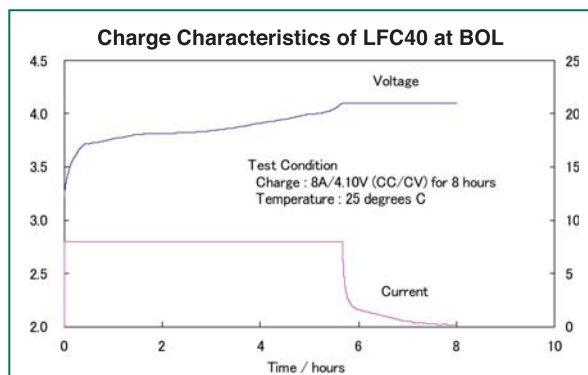
Technology

- **Lithium Cobalt Oxide cathode material:**
Provides the best combination of high reliability, high energy storage, and long life.
- **Elliptical cylindrical construction :**
Allows for better thermal management and packaging efficiency when compared to cylindrical cells

Cell construction



Cell Characteristics



Safety and Handling information

To insure personnel safety and specified product performance, read and understand the LFC40 Instruction Manual before handling, testing, or installing the cells. Inappropriate handling or application of the cells can result in reduced cell life and performance, electrolyte leakage, high cell temperatures, and even the possibility of smoke generation and fire.

GS Yuasa strongly recommends that LFC40 cells be utilized with appropriate battery protection circuitry. Recommended protection circuitry requirements are available upon request. GS Yuasa can also provide battery systems, complete with cell balancing, monitoring and protection electronics for your specific application.

Cell design details and specifications are subject to change without notice.

Contacts

Asia, Europe and others:

GS Yuasa International Ltd.

1-8-1, Nishi-Shimbashi, Minato-ku,

Tokyo 105-0003, Japan

TEL: +81-3-3597-2407 FAX: +81-3-3597-2405

<http://www.gs-yuasa.com/us>

America:

GS Yuasa Lithium Power, Inc

1000 Mansell Exchange West, Suite 350

Alpharetta, GA 30022

Toll Free: 888.GS Yuasa/888.479-8272 FAX: 678-739-2132

<http://www.gsyuasa-lp.com>