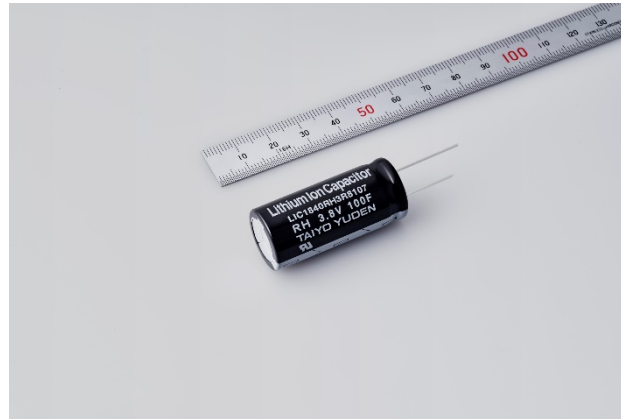


For immediate release

TAIYO YUDEN Creates Industry Leading 105°C Capable Lithium Ion Capacitor
Superior in High-Temperature Characteristics, Contributing to Expanded Life under High-Temperature Environments



TOKYO, January 7, 2020 — TAIYO YUDEN CO., LTD. announced today the addition of LIC1840RH3R8107 (φ18 x 40 mm, 100 F) with an increased operating temperature limit of 105°C to its lineup of cylinder-type lithium ion capacitor LITHOSION™*1 products.

Example applications for this new capacitor include peak assistance and backup power supply in servers, drive recorders, and smart meters. When the product is used at 3.5 V, the upper limit of the operating temperature can reach +105°C, which is 20°C higher than that of our conventional product LIC1840RS3R8107 (φ18 x 40 mm, 100 F, with an operating temperature range from -30 to +85°C).

Production of the product commenced at TAIYO YUDEN ENERGY DEVICE CO., LTD. Shirakawa Plant (Nishigo-mura, Nishishirakawa-gun, Fukushima prefecture, Japan), in December 2019, with a sample price of 1,800 yen per unit.*2

Technology Background

Servers and drive recorders require an emergency power supply as backup for data protection in the event of an emergency such as a power failure or accident. On the other hand, smart meters, which require a large amount of energy within a short period of time for wireless data transmission, are equipped with a power storage device for peak assistance as a measure to supplement their power supply. Although these devices are used in high-temperature environments due to heat generation as a result of performance improvement and high-density packaging or outdoor use, the characteristics of electronics parts including lithium ion capacitors generally degrade in high-temperature environments.

To address this situation, TAIYO YUDEN sophisticated the materials technologies for cylinder-type lithium ion capacitor LITHOSION™ products to launch LIC1840RH3R8107, which has an improved operating temperature range upper limit of +105°C.

The product has reduced degradation characteristics compared to our conventional products, contributing to expanding the life of devices used in high-temperature environments.

We will continue to develop energy device products in response to market demand.

*1 LITHOSION is a registered trademark or a trademark in Japan and other countries.

*2 The sample price mentioned in this release is our direct sales price. When considering purchasing via a sales agency, please contact the agency for the sample price.

■Application

Peak assistance and backup power supply applications in servers, drive recorders, and smart meters

■Characteristics

Part number	Nominal capacitance	Size (φD × L)	Max. usable voltage	Internal resistance (max.)	Operating temperature range
LIC1840RH3R8107	100F	φ18x40mm	3.5V	75mΩ	-30°C~+105°C
			3.8V		-30°C~+85°C