



Press Release

Nippon Chemi-Con Corporation
October 5, 2021

Expansion of the Product Line of Radial Lead Type Conductive Polymer Aluminum Solid Capacitors PSG Series

Nippon Chemi-Con is expanding its product line by adding high capacitance products to the radial lead type conductive polymer aluminum solid capacitors PSG Series. We have made additions to the 16Vdc rated voltage products with a maximum of approximately 20% higher capacitance compared to existing products of the same size. We will also add ø8×16Lmm size products to products with 20Vdc to 25Vdc.

In a time where cloud environments are accelerating, Internet contents such as SNS are enhancing, and factories are shifting towards IoT, power consumption of data centers are increasing. Therefore, capacitors with a rated voltage of 16Vdc used in 12V power lines of servers require even higher capacitance. We will respond to these needs with the addition of products with a maximum of approximately 20% higher capacitance compared to existing products.

With the emergence of USB Power Delivery, the charging of many digital devices including smartphones, tablet devices and notebook computers using USB terminals became possible. As the output voltage of the USB Power Delivery will be enhanced to 20V (maximum 100W/5A) from the conventional 5V, demand for conductive polymer aluminum solid capacitors, which are high ripple current products, is increasing. In line with these market trends, we have expanded the lineup of high capacitance and high ripple current products as well as increasing the height of 20Vdc to 25Vdc rated voltage products to 16mm (the maximum height of existing products is 11.5mm).

Technical Features

16Vdc rated voltage products have achieved higher capacitance by adopting new high capacitance electrode foil. 20Vdc to 25Vdc rated voltage products have not only adopted the new high capacitance electrode foil, but also established a new technology which evenly forms conductive polymer on longer internal element.

Samples and Mass Production

Samples: available

Mass production: ongoing

Production Site

Chemi-Con Yamagata Corp. Yonezawa Plant

Main Specifications

- Category temperature range: -55°C to +105°C
- Endurance: 16Vdc - guarantees 20,000 hours at 105°C
: 20Vdc to 25Vdc - guarantees 15,000 hours at 105°C

Newly Added Products

Series	Rated voltage [Vdc]	Capacitance [μF]	Size [mm]	Equivalent series resistance (ESR) [mΩ max] (20°C, 100k to 300kHz)	Rated ripple current [mA rms] (105°C, 100kHz)
PSG	16	330	ø6.3×8	10	5,080
		330	ø6.3×8	15	3,800
		560	ø8×8	8	5,400
		560	ø8×8	16	4,000
		680	ø8×11.5	8	6,100
		680	ø8×11.5	14	4,970
		1,200	ø10×11.5	12	5,400
	20	680	ø8×16	10	6,260
	25	560	ø8×16	14	5,400

Product Appearance

