



Press Release

Nippon Chemi-Con Corporation
April 3, 2019

Radial Lead Type Conductive Polymer Aluminum Solid Capacitors PSG Series

Addition of high-capacitance products for secondary-side filtering of power supplies

Nippon Chemi-Con is expanding its product lineup by adding high-capacitance products to the SMD type conductive polymer aluminum solid capacitors PSG Series. The newly developed products feature approximately 20 to 80% higher capacitance compared to conventional products of the same size at 25Vdc rated voltage.

Adapters for smartphones and handheld game consoles are required to achieve both higher output for quick charging and further downsizing. The use of conductive polymer aluminum solid capacitors in secondary-side power supplies of these adapters is increasing because they require low ESR, high allowable ripple current, and high capacitance.

To respond to this market trend, we decided to add high-capacitance products to the current PSG Series. This enables higher output for quick charging and contributes to downsizing of equipment by reducing the number of capacitors used.

[Technical Features]

The use of new high-capacitance electrode foils and the optimization of polymer formation conditions have resulted in higher capacitance. As for ESR and rated ripple current, we maintain the same low ESR and high allowable ripple current as existing products.

[Samples and Mass Production]

Samples: July 2019

Mass production: January 2020

[Production Site]

Chemi-Con Yamagata Corp.

[Main Specifications]

- Category temperature range: -55 to +105°C
- Endurance: 15,000 hours at 105°C

[Newly Added Products]

| Series | Rated voltage [Vdc] | Capacitance [μ F] | Size [mm] | Equivalent series resistance (ESR) [m Ω max] (20°C, 100k to 300kHz) | Rated ripple current [mA _{rms}] (105°C, 100kHz) |
|--------|---------------------|------------------------|------------------|--|---|
| PSG | 25 | 150 | ϕ 6.3 x 8 | 28 | 2,780 |
| | | 270 | ϕ 8 x 8 | 18 | 3,770 |
| | | 390 | ϕ 8 x 11.5 | 16 | 4,650 |
| | | 680 | ϕ 10 x 11.5 | 14 | 5,000 |

[Product Appearance]

