



High Ripple Models Added to PSG Series of Lead Type Conductive Polymer Aluminum Solid Capacitors Rated Ripple Current Increased by 23 to 34% Compared to Existing Models

Nippon Chemi-Con has expanded the high ripple product lineup of its PSG Series of lead type conductive polymer aluminum solid capacitors.

In the current PSG Series, the rated ripple current is 3,800mA_{rms} for the existing 16V 270 μ F ϕ 6.3 \times 8mm capacitor. A large increase of 34% in this ripple current has been realized, raising the value to 5,080mA_{rms}. Further, in the 16V 560 μ F ϕ 8 \times 11.5mm capacitor, this has been increased by 23%, from 4,970mA_{rms} to 6,100mA_{rms}.



As personal computers and servers become smaller, downsizing and space saving are being also demanded of the power supply units that supply power to these products. In addition, higher efficiencies are also required, and in order to meet these needs, the use of conductive polymer aluminum solid capacitors on the secondary sides of the power supplies is increasing.

In order to match these market trends, Nippon Chemi-Con has added models with even higher ripple currents to the current PSG Series capacitors, which were designed with high capacitance for use in power supplies, thereby reducing space requirements by reducing the number of secondary side smoothing capacitors, leading to a reduction in the size of power supply units and an increase in their efficiency.

Technical Advantages:

High ripple current has been achieved by implementing the following two measures:

- By reviewing the conductive polymer material and process methods, we could successfully form highly reliable and highly conductive polymers for 16V use, and could realize even lower ESR levels.
- By reviewing the internal element structure, and by optimizing the dimensions of the electrode foil, etc., we could reduce the ESR from a structural point of view.

Mass Production Schedule:

High ripple models of the PSG Series are already being mass produced.

Specifications:

- Category temperature range: -55 ~ +105
- Endurance: 5000 hours at 105

Features:

Series	Rated Voltage [Vdc]	Capacitance [μ F]	Case Size [mm]	ESR [m Ω max] [20 , 100k ~ 300kHz]	Rated Ripple Current [mA rms/105 , 100kHz]
PSG	16	270	ϕ 6.3 \times 8	10	5080
		560	ϕ 8 \times 11.5	8	6100