



NEWS RELEASE

September 2008

NPCAP™ (Conductive Polymer Aluminum Solid Capacitors)

Offers high reliability, downsizes power supply equipments

Nippon Chemi-Con's conductive polymer aluminum solid capacitors NPCAP™ feature ultra-low and flat impedance characteristic and high ripple current capability. With excellent noise absorption, the NPCAP™ is ideal for high frequency use in digital equipments including PC and flat-screen TV. For industrial equipment, the NPCAP™ significantly improves ripple noise from power circuits. The NPCAP™ is a device well suited for CPU decoupling circuits, smoothing power circuits and filter circuits.

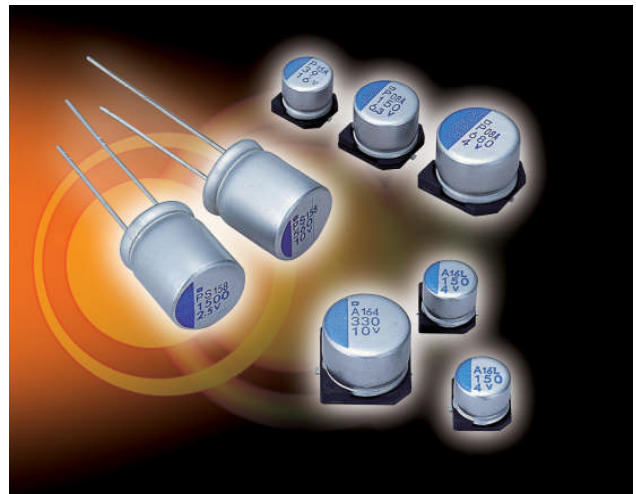
The NPCAP™ employs conductive polymer for cathode materials. The employment of solid cathode material has achieved ultra low impedance and excellent heat stability.

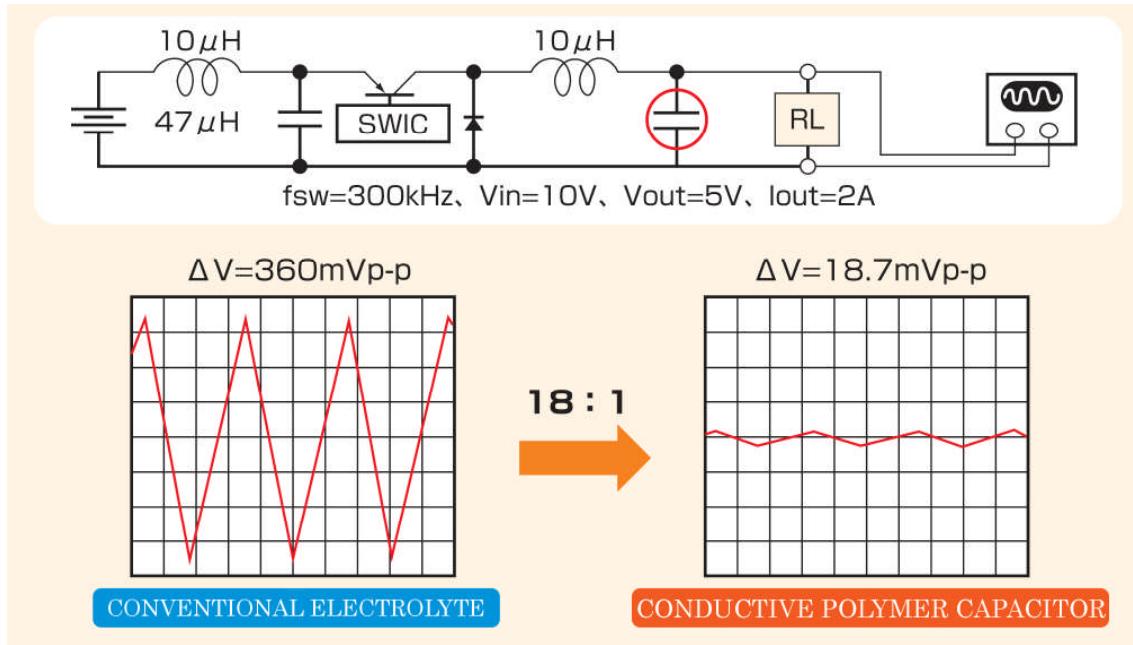
Showing ultra low and flat impedance characteristic in high- frequency area, the NPCAP™ can offer outstanding ripple rejection. For output ripple of a step-down DC/DC converter, a single piece of the NPCAP™ has the same ripple rejection capability with 18 aluminum electrolytic capacitors of low impedance type.

Related to temperature characteristics, the NPCAP™ offers highly stable capacitance change as well as ESR change.

Also preventing characteristic deterioration due to dry-up phenomenon of electrolyte found in non-solid capacitors, the NPCAP™ provides stable electrical characteristic for endurance.

Nippon Chemi-Con's NPCAP™ is an advanced device for use in higher performance and higher reliability electronic equipment.





Comparison of output ripple of DC/DC converter

NPCAP™ (main series)

Technical Specifications

[Radial lead type]

PSF series New

The new PSF series is a highly reliable product offering high endurance of 105°C, 5000hours. Halogen free.



| | |
|----------------------|--|
| Rated voltage range | 2.5V / 16V |
| Capacitance | 100 - 560 μF |
| Case size | $\phi 6.3 \times 8\text{L}$ - $\phi 10 \times 11.5\text{L}$ [mm] |
| Endurance | 5000 hours at 105°C |
| ESR | 5 - 25m Ω /20°C 100k - 300kHz |
| Rated ripple current | 2820 - 6100 mArms/105°C 100kHz |

PSC series

The flagship lead type PSC series is a high ripple current capable product offering rated ripple current of 6100mArms for product of rated voltage 16V, capacitance 470uF.

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|----------------------|--|
| Rated voltage range | 2.5 - 16V |
| Capacitance | 270 - 2700 μ F |
| Case size | ϕ 8 \times 8L – ϕ 10 \times 12.5L [mm] |
| Endurance | 2000 hours at 105°C |
| ESR | 5 - 11m Ω /20°C 100k - 300kHz |
| Rated ripple current | 5080 - 6640 mArms/105°C 100kHz |

PS series

PS series, featuring rated voltage up to 35V, is best for heightening power equipment's reliability.

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|----------------------|---|
| Rated voltage range | 2.5 - 35V |
| Capacitance | 18 – 1500 μ F |
| Case size | ϕ 8 \times 11.5L – ϕ 10 \times 12.5L [mm] |
| Endurance | 2000 hours at 105°C |
| ESR | 8 - 34m Ω /20°C 100k - 300kHz |
| Rated ripple current | 2830 - 5500 mArms/105°C 100kHz |

[Surface mount type]

PXA series

With wide range of product lineup, PXA series is a high versatile product including low profile 4.5mm height product.



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|----------------------|--|
| Rated voltage range | 2.5 - 25V |
| Capacitance | 3.3 - 1500 μ F |
| Case size | ϕ 4 \times 5.2L – ϕ 10 \times 12.2L [mm] |
| Endurance | 2000 hours at 105°C |
| ESR | 10 - 260m Ω /20°C 100kHz |
| Rated ripple current | 660 - 5500 mArms/105°C 100kHz - 300kHz |

PXE series

PXE series is an ultra low ESR product that has reduced ESR by 40% compared to PXA series same size.

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|----------------------|--|
| Rated voltage range | 2.5 - 16V |
| Capacitance | 33 - 2700 μ F |
| Case size | ϕ 5 \times 5.8L – ϕ 10 \times 12.2L [mm] |
| Endurance | 2000 hours at 105°C |
| ESR | 9 - 35m Ω /20°C 100kHz |
| Rated ripple current | 2070 - 5600 mArms/105°C 100kHz - 300kHz |

PXH series

PXH series is high heat resistance 125°C product that can be used for downsizing and heightening reliability of power equipments.

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|----------------------|---|
| Rated voltage range | 2.5 - 20V |
| Capacitance | 22 -1000 μ F |
| Case size | ϕ 6.3 \times 5.7L - ϕ 10 \times 7.7L [mm] |
| Endurance | 1000 hours at 125°C |
| ESR | 25 - 60m Ω /20°C 100kHz |
| Rated ripple current | 1650 - 3700 mArms/105°C 100kHz - 300kHz |