

Upgrade!
NPCAP™-PSA Series

- Super low ESR, high temperature resistance and high ripple current capability
- Rated voltage range : 2.5 to 16V_{dc}
- 2000 hours at 105°C
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards
- Pb-free design



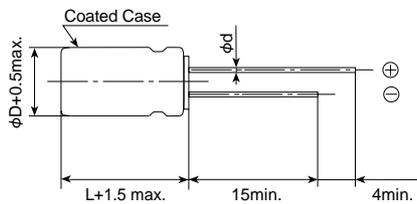
◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | |
|---------------------------------|---|------------|-----------------------|--------------------|-------------------------------------|-------------|--------------------------------------|-----|--------------------------------------|-----------------|------------------------------|
| Category | | | | | | | | | | | |
| Temperature Range | -55 to +105°C | | | | | | | | | | |
| Rated Voltage Range | 2.5 to 16V _{dc} | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | |
| Surge Voltage | Rated voltage×1.15V (at 105°C) | | | | | | | | | | |
| Leakage Current | I=0.2CV (max.) | | | | | | | | | | |
| *Note | Where, I : Leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V _{dc}) (at 20°C after 2 minutes) | | | | | | | | | | |
| Dissipation Factor (tanδ) | 0.08 max. (at 20°C, 120Hz) | | | | | | | | | | |
| Low Temperature Characteristics | Max. impedance ratio at 100kHz to the 20°C value Z(-25°C)/Z(+20°C) ≤ 1.15 Z(-55°C)/Z(+20°C) ≤ 1.25 | | | | | | | | | | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C. | | | | | | | | | | |
| | <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤±20% of the initial measured value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table> | Appearance | No significant damage | Capacitance change | ≤±20% of the initial measured value | D.F. (tanδ) | ≤150% of the initial specified value | ESR | ≤150% of the initial specified value | Leakage current | ≤The initial specified value |
| Appearance | No significant damage | | | | | | | | | | |
| Capacitance change | ≤±20% of the initial measured value | | | | | | | | | | |
| D.F. (tanδ) | ≤150% of the initial specified value | | | | | | | | | | |
| ESR | ≤150% of the initial specified value | | | | | | | | | | |
| Leakage current | ≤The initial specified value | | | | | | | | | | |
| Bias Humidity Test | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to DC voltage at 60°C, 90 to 95% RH for 1000 hours. | | | | | | | | | | |
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| D.F. (tanδ) | ≤150% of the initial specified value | | | | | | | | | | |
| ESR | ≤150% of the initial specified value | | | | | | | | | | |
| Leakage current | ≤The initial specified value | | | | | | | | | | |
| Surge Voltage Test | The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds. | | | | | | | | | | |
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| D.F. (tanδ) | ≤150% of the initial specified value | | | | | | | | | | |
| ESR | ≤150% of the initial specified value | | | | | | | | | | |
| Leakage current | ≤The initial specified value | | | | | | | | | | |
| Failure Rate | 1% per 1000 hours maximum (Confidence level 60% at 105°C) | | | | | | | | | | |

*Note : If any doubt arises, measure the leakage current after the following voltage treatment.
Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

◆ DIMENSIONS [mm]

- Terminal Code : E



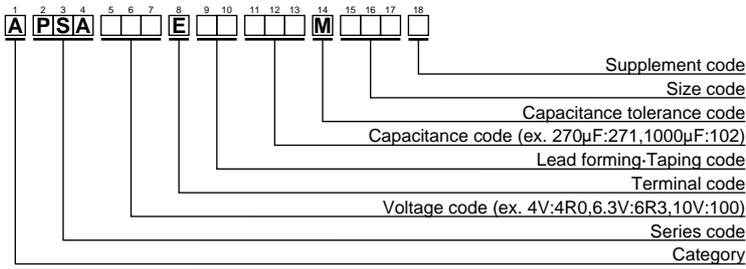
| φD | 6.3 | 8 | 10 |
|----|-------|-------|----|
| φd | 0.5 | 0.8 | |
| L' | L+1.0 | L+1.5 | |
| F | 2.5 | 3.5 | 5 |

◆ MARKING

EX) 4V560μF



◆PART NUMBERING SYSTEM



Please refer to "A guide to global code (conductive polymer type)"

◆STANDARD RATINGS

| WV(Vdc) | Cap(μ F) | Case size ϕ D \times L(mm) | ESR (m Ω max/20°C, 100k to 300kHz) | Rated ripple current (mArms/105°C, 100kHz) | Part No. |
|---------|---------------|--------------------------------------|--|---|--------------------|
| 2.5 | 390 | 6.3 \times 9.8 | 20 | 3160 | APSA2R5E□□391MF9JG |
| | 680 | 8 \times 11.5 | 7 | 5580 | APSA2R5E□□681MHB5S |
| | 820 | 8 \times 11.5 | 7 | 5580 | APSA2R5E□□821MHB5S |
| | 1000 | 10 \times 11.5 | 6 | 5860 | APSA2R5E□□102MJB5S |
| 4 | 270 | 6.3 \times 9.8 | 20 | 3160 | APSA4R0E□□271MF9JG |
| | 390 | 6.3 \times 9.8 | 24 | 3300 | APSA4R0E□□391MF9JG |
| | 560 | 8 \times 11.5 | 7 | 5580 | APSA4R0E□□561MHB5S |
| | 820 | 10 \times 11.5 | 6 | 5860 | APSA4R0E□□821MJB5S |
| 6.3 | 220 | 6.3 \times 9.8 | 20 | 3160 | APSA6R3E□□221MF9JG |
| | 330 | 6.3 \times 9.8 | 28 | 3190 | APSA6R3E□□331MF9JG |
| | 390 | 8 \times 11.5 | 8 | 5080 | APSA6R3E□□391MHB5S |
| | 680 | 10 \times 11.5 | 7 | 5860 | APSA6R3E□□681MJB5S |
| 10 | 47 | 6.3 \times 9.8 | 25 | 2820 | APSA100E□□470MF9JG |
| | 68 | 6.3 \times 9.8 | 25 | 2820 | APSA100E□□680MF9JG |
| | 100 | 6.3 \times 9.8 | 25 | 2820 | APSA100E□□101MF9JG |
| | 150 | 6.3 \times 9.8 | 25 | 2820 | APSA100E□□151MF9JG |
| | 270 | 8 \times 11.5 | 9 | 4710 | APSA100E□□271MHB5S |
| 16 | 470 | 10 \times 11.5 | 8 | 5650 | APSA100E□□471MJB5S |
| 16 | 100 | 6.3 \times 9.8 | 25 | 2820 | APSA160E□□101MF9JG |

□□ : Lead forming code and taping code

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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