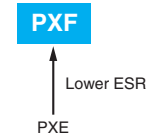


NPCAP™-PXF Series

- Super low ESR, impedance and high heat resistance have been obtained by using conductive polymer as electrolyte.
- Rated voltage range : 2 to 10V_{dc}, Capacitance range : 120 to 1,000μF
- Case size range : φ5x3.9L to φ8x7.7L
- Suitable for DC-DC converters, voltage regulators and decoupling applications used on computer motherboards etc.
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free



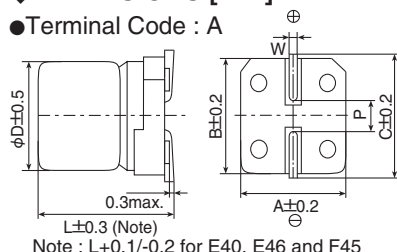
◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | |
|---|--|----------------------------------|-----------------------|--------------------|--------------------------------------|--------------|---------------------------------------|----------------------------------|---------------------------------------|-----------------|---|-----|----|
| Category | -55 to +105°C | | | | | | | | | | | | |
| Temperature Range | | | | | | | | | | | | | |
| Rated Voltage Range | 2 to 10V _{dc} | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | | | |
| Leakage Current *Note | Shall not exceed values shown in STANDARD RATINGS. (at 20°C after 2 minutes) | | | | | | | | | | | | |
| Dissipation Factor (tan δ) | 0.12 max. (at 20°C, 120Hz) | | | | | | | | | | | | |
| Low Temperature Characteristics (Max. Impedance Ratio) | Z(-25°C)/Z(+20°C) ≤ 1.15 Z(-55°C)/Z(+20°C) ≤ 1.25 (at 100kHz) | | | | | | | | | | | | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 15,000 hours (E40, E46, F45 : 3,000 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 value</td></tr> <tr><td>D.F. (tan δ)</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 value | D.F. (tan δ) | ≤ 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 value | | | | | | | | | | | | |
| D.F. (tan δ) | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| ESR | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value | | | | | | | | | | | | |
| Bias Humidity | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 60°C, 90 to 95% RH for 1,000 hours (E40, E46, F45 : 500 hours). | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Appearance</td><td>No significant damage</td></tr> <tr><td>Capacitance change</td><td>≤ ±20% of the initial value</td></tr> <tr><td>D.F. (tan δ)</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 value | D.F. (tan δ) | ≤ 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 value | | | | | | | | | | | | |
| D.F. (tan δ) | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| ESR | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value | | | | | | | | | | | | |
| Surge Voltage | The capacitors shall be subjected to 1,000 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. | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Rated voltage (V_{dc})</td> <td>2.0</td> <td>2.5</td> <td>4.0</td> <td>6.3</td> <td>10</td> </tr> <tr> <td>Surge voltage (V_{dc})</td> <td>2.3</td> <td>2.9</td> <td>4.6</td> <td>7.2</td> <td>12</td> </tr> </table> | Rated voltage (V _{dc}) | 2.0 | 2.5 | 4.0 | 6.3 | 10 | Surge voltage (V _{dc}) | 2.3 | 2.9 | 4.6 | 7.2 | 12 |
| Rated voltage (V _{dc}) | 2.0 | 2.5 | 4.0 | 6.3 | 10 | | | | | | | | |
| Surge voltage (V _{dc}) | 2.3 | 2.9 | 4.6 | 7.2 | 12 | | | | | | | | |
| | <table border="1"> <tr><td>Appearance</td><td>No significant damage</td></tr> <tr><td>Capacitance change</td><td>≤ ±20% of the initial value</td></tr> <tr><td>D.F. (tan δ)</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 value | D.F. (tan δ) | ≤ 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 value | | | | | | | | | | | | |
| D.F. (tan δ) | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| ESR | ≤ 150% of the initial specified value | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value | | | | | | | | | | | | |
| Soldering Heat | The following specifications shall be satisfied when the solder temperature is reduced back to 20°C to measure dip resistance after soldering has been performed under the recommended soldering conditions. | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Appearance</td><td>No significant damage</td></tr> <tr><td>Capacitance value</td><td>Within the specified tolerance range</td></tr> <tr><td>D.F. (tan δ)</td><td>≤ The initial specified value</td></tr> <tr><td>ESR</td><td>≤ The initial specified value</td></tr> <tr><td>Leakage current</td><td>≤ The initial specified value (Voltage treatment)</td></tr> </table> | Appearance | No significant damage | Capacitance value | Within the specified tolerance range | D.F. (tan δ) | ≤ The initial specified value | ESR | ≤ The initial specified value | Leakage current | ≤ The initial specified value (Voltage treatment) | | |
| Appearance | No significant damage | | | | | | | | | | | | |
| Capacitance value | Within the specified tolerance range | | | | | | | | | | | | |
| D.F. (tan δ) | ≤ The initial specified value | | | | | | | | | | | | |
| ESR | ≤ The initial specified value | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value (Voltage treatment) | | | | | | | | | | | | |
| Failure Rate | 0.5% per 1,000 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 : A



| Size Code | φD | L | A | B | C | W | P |
|-----------|-----|-----|-----|-----|-----|------------|-----|
| E40 | 5 | 3.9 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| E46 | 5 | 4.5 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| E61 | 5 | 5.8 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| F45 | 6.3 | 4.4 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| F61 | 6.3 | 5.8 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| F80 | 6.3 | 7.7 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| H70 | 8 | 6.7 | 8.3 | 8.3 | 9.0 | 0.7 to 1.1 | 3.1 |
| H80 | 8 | 7.7 | 8.3 | 8.3 | 9.0 | 0.7 to 1.1 | 3.1 |

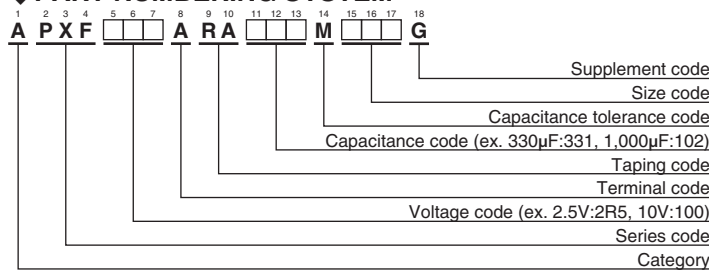
◆MARKING

EX) 2.5V390μF



NPCAP™-PXF Series

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (conductive polymer type)"

◆STANDARD RATINGS

| WV (V _{dc}) | Cap (µF) | Size code | Leakage current (µA max./after 2min.) | ESR (mΩ max./20°C, 100k to 300kHz) | Rated ripple current (mArms/105°C, 100kHz) | Part No. |
|-----------------------|----------|-----------|---------------------------------------|------------------------------------|--|--------------------|
| 2 | 680 | F61 | 700 | 12 | 3,500 | APXF2R0ARA681MF61G |
| 2.5 | 220 | E40 | 700 | 12 | 3,300 | APXF2R5ARA221ME40G |
| | 220 | E46 | 700 | 25 | 2,100 | APXF2R5ARA221ME46G |
| | 330 | E61 | 700 | 10 | 3,900 | APXF2R5ARA331ME61G |
| | 330 | F45 | 700 | 12 | 3,500 | APXF2R5ARA331MF45G |
| | 390 | E61 | 700 | 10 | 3,900 | APXF2R5ARA391ME61G |
| | 390 | F61 | 292 | 10 | 3,900 | APXF2R5ARA391MF61G |
| | 470 | F80 | 352 | 9 | 4,200 | APXF2R5ARA471MF80G |
| | 560 | F61 | 700 | 10 | 3,900 | APXF2R5ARA561MF61G |
| | 560 | F80 | 420 | 9 | 4,200 | APXF2R5ARA561MF80G |
| | 560 | H70 | 420 | 10 | 4,500 | APXF2R5ARA561MH70G |
| | 680 | H70 | 510 | 10 | 4,500 | APXF2R5ARA681MH70G |
| 1,000 | H80 | 750 | 9 | 4,500 | APXF2R5ARA102MH80G | |
| 4 | 330 | F61 | 396 | 10 | 3,900 | APXF4R0ARA331MF61G |
| | 390 | F80 | 468 | 9 | 4,200 | APXF4R0ARA391MF80G |
| | 470 | H70 | 564 | 10 | 4,500 | APXF4R0ARA471MH70G |
| | 560 | H70 | 672 | 10 | 4,500 | APXF4R0ARA561MH70G |
| | 680 | H80 | 816 | 9 | 4,500 | APXF4R0ARA681MH80G |
| 6.3 | 150 | E40 | 700 | 20 | 2,700 | APXF6R3ARA151ME40G |
| | 150 | E46 | 700 | 25 | 2,100 | APXF6R3ARA151ME46G |
| | 150 | E61 | 700 | 12 | 3,500 | APXF6R3ARA151ME61G |
| | 220 | E61 | 700 | 12 | 3,500 | APXF6R3ARA221ME61G |
| | 220 | F61 | 415 | 10 | 3,900 | APXF6R3ARA221MF61G |
| | 270 | F80 | 510 | 9 | 4,200 | APXF6R3ARA271MF80G |
| | 330 | F61 | 700 | 10 | 3,900 | APXF6R3ARA331MF61G |
| | 330 | F80 | 623 | 9 | 4,200 | APXF6R3ARA331MF80G |
| | 330 | H70 | 623 | 10 | 4,500 | APXF6R3ARA331MH70G |
| | 390 | H70 | 737 | 10 | 4,500 | APXF6R3ARA391MH70G |
| | 470 | H80 | 888 | 9 | 4,500 | APXF6R3ARA471MH80G |
| 560 | H80 | 1,050 | 9 | 4,500 | APXF6R3ARA561MH80G | |
| 10 | 120 | E61 | 240 | 22 | 2,600 | APXF100ARA121ME61G |
| | 270 | F61 | 540 | 20 | 2,800 | APXF100ARA271MF61G |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency (Hz) | 120 | 1k | 10k | 50k | 100k to 500k |
|----------------|------|------|------|------|--------------|
| SMD type | 0.05 | 0.30 | 0.55 | 0.70 | 1.00 |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[United Chemi-Con \(UCC\):](#)

[APXF2R0ARA681MF61G](#) [APXF100ARA121ME61G](#) [APXF100ARA271MF61G](#)

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А