

## OVH Series

### Features

- 105°C, 2,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance



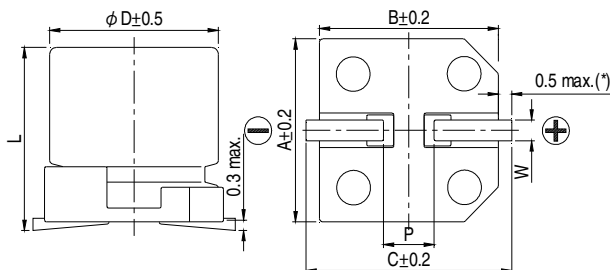
Marking color: Blue

### Specifications

| Items   | Performance  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|---|--|-----------------------------------|------------------------------|--------------------|------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|------------------------|
| Category Temperature Range  | -55°C ~ +105°C   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Capacitance Tolerance   | ±20% (at 120Hz, 20°C)  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Leakage Current (at 20°C)*  | Rated voltage applied, after 2 minutes at 20°C.<br>See Standard Ratings  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Tanδ (at 120Hz, 20°C)   | See Standard Ratings   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| ESR (at 100k ~ 300k Hz, 20°C)   | See Standard Ratings   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Endurance   | <table border="1"> <tr> <td>Test Time</td> <td>2,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> | Test Time                         | 2,000 Hrs                    | Capacitance Change | Within ±20% of initial value | Tanδ            | Less than 150% of specified value | ESR             | Less than 150% of specified value | Leakage Current | Within specified value |
|   | Test Time  | 2,000 Hrs                         |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | Capacitance Change   | Within ±20% of initial value      |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | Tanδ   | Less than 150% of specified value |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | ESR  | Less than 150% of specified value |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Leakage Current   | Within specified value   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| * The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours at 105°C.  |  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Moisture Resistance   | <table border="1"> <tr> <td>Test Time</td> <td>1,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> | Test Time                         | 1,000 Hrs                    | Capacitance Change | Within ±20% of initial value | Tanδ            | Less than 150% of specified value | ESR             | Less than 150% of specified value | Leakage Current | Within specified value |
|   | Test Time  | 1,000 Hrs                         |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | Capacitance Change   | Within ±20% of initial value      |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | Tanδ   | Less than 150% of specified value |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | ESR  | Less than 150% of specified value |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Leakage Current   | Within specified value   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| * The above specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, 90 to 95% RH for 1,000 hours. Leakage current should be tested after voltage treatment*.  |  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Resistance to Soldering Heat *<br>(Please refer to page 25 for reflow soldering conditions)   | <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±10% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Within specified value</td> </tr> <tr> <td>ESR</td> <td>Within specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>  | Capacitance Change                | Within ±10% of initial value | Tanδ               | Within specified value       | ESR             | Within specified value            | Leakage Current | Within specified value            |                 |                        |
|   | Capacitance Change   | Within ±10% of initial value      |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | Tanδ   | Within specified value            |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
|   | ESR  | Within specified value            |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Leakage Current   | Within specified value   |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| Ripple Current and Frequency Multipliers  |  |                                   |                              |                    |                              |                 |                                   |                 |                                   |                 |                        |
| <table border="1"> <thead> <tr> <th>Frequency (Hz)</th> <th>120 ≤ f &lt; 1k</th> <th>1k ≤ f &lt; 10k</th> <th>10k ≤ f &lt; 100k</th> <th>100k ≤ f &lt; 500k</th> </tr> </thead> <tbody> <tr> <td>Multiplier</td> <td>0.05</td> <td>0.3</td> <td>0.7</td> <td>1.0</td> </tr> </tbody> </table> |  | Frequency (Hz)                    | 120 ≤ f < 1k                 | 1k ≤ f < 10k       | 10k ≤ f < 100k               | 100k ≤ f < 500k | Multiplier                        | 0.05            | 0.3                               | 0.7             | 1.0                    |
| Frequency (Hz)  | 120 ≤ f < 1k   | 1k ≤ f < 10k                      | 10k ≤ f < 100k               | 100k ≤ f < 500k    |                              |                 |                                   |                 |                                   |                 |                        |
| Multiplier  | 0.05   | 0.3                               | 0.7                          | 1.0                |                              |                 |                                   |                 |                                   |                 |                        |

\* For any doubt about measured values, measure the leakage current again after the following voltage treatment.  
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

### Diagram of Dimensions



### Lead Spacing and Diameter

Unit: mm

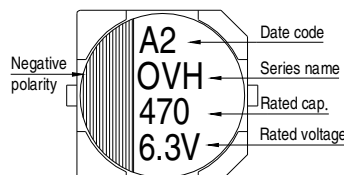
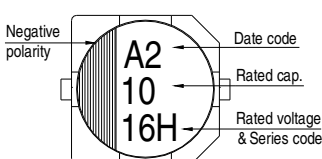
| φD  | L                | A    | B    | C    | W         | P ± 0.2 |
|-----|------------------|------|------|------|-----------|---------|
| 6.3 | 4.4 ± 0.2        | 6.6  | 6.6  | 7.2  | 0.5 ~ 0.8 | 2.0     |
| 6.3 | 5.9 + 0.1 / -0.3 | 6.6  | 6.6  | 7.2  | 0.5 ~ 0.8 | 2.0     |
| 8   | 6.7 ± 0.3        | 8.3  | 8.3  | 9.0  | 0.7 ~ 1.1 | 3.1     |
| 10  | 7.7 ± 0.3        | 10.3 | 10.3 | 11.0 | 0.7 ~ 1.3 | 4.7     |
| 10  | 9.9 + 0.1 / -0.3 | 10.3 | 10.3 | 11.0 | 0.7 ~ 1.3 | 4.7     |

(\*): For 6.3φ is 0.4 max.

### Marking

φD = 6.3

φD = 8 ~ 10





Dimension:  $\phi$  DxL(mm)  
Ripple Current: mA/rms at 100k Hz, 105°C

Standard Ratings

| Rated Volt. (V) | Surge Voltage (V) | Capacitance ( $\mu$ F) | Size $\phi$ DxL(mm) | Tan $\delta$ (120Hz, 20°C) | LC ( $\mu$ A) | E S R (m $\Omega$ /at 100k ~ 300k Hz, 20°C max.) | Rated R. C. (mA/rms at 100k Hz, 105°C) |
|-----------------|-------------------|------------------------|---------------------|----------------------------|---------------|--|--|
| 2.5V (0E)       | 2.9               | 330                    | 6.3 x 4.4           | 0.12                       | 500           | 14   | 3,180                                  |
|                 |                   | 390                    | 6.3 x 5.9           | 0.12                       | 293           | 10   | 3,900                                  |
|                 |                   | 560                    | 6.3 x 5.9           | 0.12                       | 700           | 10   | 3,900                                  |
|                 |                   |                        | 8 x 6.7             | 0.12                       | 420           | 9  | 4,200                                  |
|                 |                   | 680                    | 8 x 6.7             | 0.12                       | 510           | 9  | 4,500                                  |
|                 |                   | 1,200                  | 10 x 7.7            | 0.12                       | 900           | 9  | 5,000                                  |
| 2,200           | 10 x 9.9          | 0.12                   | 1,650               | 8                          | 6,000         |  |  |
| 4V (0G)         | 4.6               | 330                    | 6.3 x 5.9           | 0.12                       | 396           | 10   | 3,900                                  |
|                 |                   | 470                    | 8 x 6.7             | 0.12                       | 564           | 9  | 4,500                                  |
|                 |                   | 560                    | 8 x 6.7             | 0.12                       | 894           | 9  | 4,500                                  |
|                 |                   | 1,000                  | 10 x 7.7            | 0.12                       | 1,200         | 9  | 5,000                                  |
|                 |                   | 1,800                  | 10 x 9.9            | 0.12                       | 2,160         | 8  | 6,000                                  |
| 6.3V (0J)       | 7.2               | 220                    | 6.3 x 4.4           | 0.12                       | 500           | 15   | 3,180                                  |
|                 |                   |                        | 6.3 x 5.9           | 0.12                       | 416           | 10   | 3,900                                  |
|                 |                   | 330                    | 8 x 6.7             | 0.12                       | 624           | 9  | 4,500                                  |
|                 |                   | 390                    | 8 x 6.7             | 0.12                       | 737           | 9  | 4,500                                  |
|                 |                   | 820                    | 10 x 7.7            | 0.12                       | 1,550         | 9  | 5,000                                  |
|                 |                   | 1,500                  | 10 x 9.9            | 0.12                       | 2,835         | 8  | 6,000                                  |

Part Numbering System

OVH Series    820 $\mu$ F     $\pm$ 20%    6.3V    Carrier Tape    10  $\phi$  x7.7L    Pb-free and PET coating case

**OVH**    **821**    **M**    **OJ**    **TR**    -    **1008**

Series Name    Capacitance    Capacitance Tolerance    Rated Voltage    Package Type    Terminal Type    Case size    Lead Wire and Coating Type

Note: For more details, please refer to "Part Numbering System (SMD Type)" on page 15.



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

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.