

PE Series

性能特点 Feature

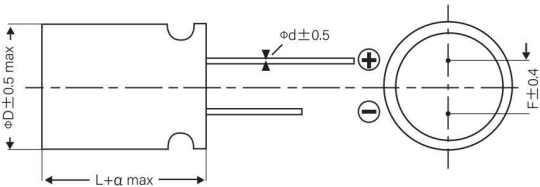
- Rate voltage: 2.5~35Vdc.
- Endurance: 2000~3000hrs at 105°C
- Suitable for AC-DC DC-DC converters, voltage regulators and decoupling applications
- RoHS Compliant



技术性能 Specifications

|                          |                                                                                                                                                                                                                                                                                                                                         |              |                                       |                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------|-------------------------|
| Category                 | Temperature Range                                                                                                                                                                                                                                                                                                                       | -55 to 105°C | Rated Voltage Range                   | 2.5 to 35Vdc            |
| Rated Capacitance Range  | 100 to 2200(μF)                                                                                                                                                                                                                                                                                                                         |              | Capacitance Tolerance                 | ±20%(M)                 |
| Surge Voltage            | Rated voltage X 1.15 (at 105°C)                                                                                                                                                                                                                                                                                                         |              | Dissipation Factor                    | 0.1 max.(at 20°C 120Hz) |
| Leakage Current          | Shall not exceed values shown in standard ratings. (at 20°C after 2 mins.)                                                                                                                                                                                                                                                              |              |                                       |                         |
| Endurance                | 105°C, 3000hrs, rated voltage applied                                                                                                                                                                                                                                                                                                   |              |                                       |                         |
|                          | Appearance                                                                                                                                                                                                                                                                                                                              |              | No significant damage                 |                         |
|                          | Capacitance Change                                                                                                                                                                                                                                                                                                                      |              | ≤ ±20% of the initial value           |                         |
|                          | DF(tanδ)                                                                                                                                                                                                                                                                                                                                |              | ≤ 150% of the initial specified value |                         |
|                          | ESR                                                                                                                                                                                                                                                                                                                                     |              | ≤ 150% of the initial specified value |                         |
|                          | Leakage current                                                                                                                                                                                                                                                                                                                         |              | ≤ The initial specified value         |                         |
| Damp Heat (Steady State) | 60°C,90 to 95% RH, 1000hrs, no voltage applied                                                                                                                                                                                                                                                                                          |              |                                       |                         |
|                          | Appearance                                                                                                                                                                                                                                                                                                                              |              | No significant damage                 |                         |
|                          | Capacitance Change                                                                                                                                                                                                                                                                                                                      |              | ≤ ±20% of the initial value           |                         |
|                          | DF(tanδ)                                                                                                                                                                                                                                                                                                                                |              | ≤ 150% of the initial specified value |                         |
|                          | ESR                                                                                                                                                                                                                                                                                                                                     |              | ≤ 150% of the initial specified value |                         |
|                          | Leakage current                                                                                                                                                                                                                                                                                                                         |              | ≤ The initial specified value         |                         |
| Surge Voltage            | 1000 (2.5~4V)cycles and each one includes charge with surge voltage specified at 105°C for 0.5min through a protective resistor (R=1kΩ) and discharge for 5.5min.<br>2000 (6.5~35V)cycles and each one includes charge with surge voltage specified at 105°C for 0.5min through a protective resistor (R=1kΩ) and discharge for 5.5min. |              |                                       |                         |
|                          | Appearance                                                                                                                                                                                                                                                                                                                              |              | No significant damage                 |                         |
|                          | Capacitance Change                                                                                                                                                                                                                                                                                                                      |              | ≤ ±20% of the initial value           |                         |
|                          | DF(tanδ)                                                                                                                                                                                                                                                                                                                                |              | ≤ 150% of the initial specified value |                         |
|                          | ESR                                                                                                                                                                                                                                                                                                                                     |              | ≤ 150% of the initial specified value |                         |
|                          | Leakage current                                                                                                                                                                                                                                                                                                                         |              | ≤ The initial specified value         |                         |

尺寸和标记 Dimensions And Marking



| SIZE Code | ΦD±0.5 max | L    | α        | ød ±0.5 | F±0.4 |
|-----------|------------|------|----------|---------|-------|
| 05X7      | 5.0        | 7.0  | -0.5~1.0 | 0.5     | 2.0   |
| 05X8      | 5.0        | 8.0  | -0.5~1.0 | 0.5     | 2.0   |
| 06X5      | 6.3        | 5.0  | -0.5~1.0 | 0.45    | 2.5   |
| 06X8      | 6.3        | 8.0  | -0.5~1.0 | 0.6     | 2.5   |
| 06A0      | 6.3        | 10.0 | -0.5~1.0 | 0.6     | 2.5   |
| 06A1      | 6.3        | 11.0 | -0.5~1.0 | 0.6     | 2.5   |
| 08X8      | 8.0        | 8.0  | -0.5~1.0 | 0.6     | 3.5   |
| 0811      | 8.0        | 11.0 | -0.5~1.0 | 0.6     | 3.5   |
| 08A2      | 8.0        | 12.0 | -0.5~1.0 | 0.6     | 3.5   |
| 08A6      | 8.0        | 16.0 | -0.5~1.0 | 0.6     | 3.5   |
| 08B0      | 8.0        | 20.0 | -0.5~1.0 | 0.6     | 3.5   |
| 10A0      | 10.0       | 10.0 | -0.5~1.0 | 0.6     | 5.0   |
| 1010      | 10.0       | 10.0 | -0.5~1.0 | 0.6     | 5.0   |
| 10A2      | 10.0       | 12.0 | -0.5~1.0 | 0.6     | 5.0   |
| 10A6      | 10.0       | 16.0 | -0.5~1.0 | 0.6     | 5.0   |
| 10B0      | 10.0       | 20.0 | -0.5~1.0 | 0.6     | 5.0   |

PE Series

标准评级 Standard Ratings

| WV/Vdc (sv) | Cap (μF) | Size Code | Leakage Current (μA) | ESR (mΩ max/20°C,100k to 300kHz) | Rated Ripple Current (mA rms/ 105°C/100kHz) |
|-------------|----------|-----------|----------------------|----------------------------------|---------------------------------------------|
| 2.5 (2.9)   | 560      | 06X8      | 500                  | 7                                | 5000                                        |
|             | 560      | 08X8      | 500                  | 7                                | 6100                                        |
|             | 820      | 06X8      | 500                  | 7                                | 5000                                        |
|             | 820      | 08X8      | 500                  | 7                                | 6100                                        |
|             | 1,000    | 08X8      | 500                  | 7                                | 6100                                        |
|             | 1200     | 08X8      | 600                  | 7                                | 6100                                        |
|             | 1500     | 08A2      | 750                  | 7                                | 6100                                        |
|             | 1500     | 10A2      | 750                  | 7                                | 6640                                        |
|             | 2200     | 10A2      | 1100                 | 7                                | 6640                                        |
| 4 (4.6)     | 560      | 08X8      | 500                  | 7                                | 6100                                        |
|             | 1200     | 08X8      | 960                  | 7                                | 6100                                        |
| 6.3 (7.2)   | 220      | 06X5      | 277                  | 15                               | 3160                                        |
|             | 270      | 05X7      | 340                  | 12                               | 3500                                        |
|             | 330      | 05X8      | 500                  | 8                                | 4050                                        |
|             | 330      | 06X5      | 500                  | 17                               | 3390                                        |
|             | 330      | 06X8      | 500                  | 8                                | 4700                                        |
|             | 390      | 05X8      | 500                  | 11                               | 3700                                        |
|             | 470      | 05X8      | 592                  | 8                                | 4050                                        |
|             | 470      | 06X8      | 592                  | 8                                | 4700                                        |
|             | 560      | 06X8      | 705                  | 8                                | 4700                                        |
|             | 680      | 06X8      | 857                  | 8                                | 4700                                        |
|             | 820      | 06X8      | 1033                 | 8                                | 4700                                        |
|             | 1000     | 06A0      | 1260                 | 8                                | 4700                                        |
|             | 1000     | 08X8      | 1260                 | 7                                | 6100                                        |
|             | 1200     | 08A2      | 1512                 | 7                                | 6100                                        |
|             | 1500     | 08A2      | 1890                 | 7                                | 6100                                        |
|             | 1500     | 10A0      | 1890                 | 12                               | 5025                                        |
| 6.8 (7.8)   | 1500     | 10A2      | 1890                 | 7                                | 6640                                        |
|             | 270      | 05X7      | 367                  | 12                               | 3500                                        |
|             | 330      | 05X8      | 449                  | 11                               | 3800                                        |
|             | 470      | 05X8      | 639                  | 8                                | 3200                                        |
|             | 500      | 05X8      | 680                  | 11                               | 3800                                        |
|             | 820      | 06X8      | 1115                 | 8                                | 5500                                        |
| 7.5 (8.6)   | 1000     | 06A0      | 1360                 | 8                                | 5500                                        |
|             | 270      | 05X7      | 405                  | 12                               | 3500                                        |
|             | 390      | 05X8      | 585                  | 11                               | 3800                                        |
|             | 500      | 05X8      | 750                  | 12                               | 3500                                        |
|             | 560      | 06X8      | 705                  | 8                                | 4700                                        |
|             | 680      | 06X8      | 1020                 | 12                               | 4780                                        |
|             | 820      | 06A1      | 1230                 | 10                               | 5200                                        |

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标准评级 Standard Ratings

| WV/Vdc<br>(sv) | Cap<br>(μF) | Size<br>Code | Leakage<br>Current<br>(μA) | ESR<br>(mΩ max/20°C,100k to<br>300kHz) | Rated Ripple Current<br>(mArms/<br>105°C/100kHz) |
|----------------|-------------|--------------|----------------------------|----------------------------------------|--------------------------------------------------|
| 10<br>(11.5)   | 220         | 06X8         | 440                        | 10                                     | 4500                                             |
|                | 330         | 06X8         | 660                        | 10                                     | 4500                                             |
|                | 470         | 06A0         | 940                        | 10                                     | 4700                                             |
|                | 560         | 06A0         | 1120                       | 10                                     | 4700                                             |
|                | 680         | 08X8         | 1360                       | 12                                     | 4700                                             |
|                | 820         | 08A2         | 1640                       | 7                                      | 6100                                             |
|                | 1000        | 08A2         | 2000                       | 8                                      | 6100                                             |
|                | 1200        | 08A2         | 2400                       | 12                                     | 3900                                             |
| 12<br>(13.8)   | 470         | 06A0         | 1128                       | 12                                     | 3900                                             |
|                | 560         | 06A0         | 1344                       | 12                                     | 3900                                             |
| 16<br>(18.4)   | 100         | 05X8         | 320                        | 18                                     | 2690                                             |
|                | 220         | 05X8         | 704                        | 18                                     | 2600                                             |
|                | 220         | 06X8         | 704                        | 15                                     | 3200                                             |
|                | 270         | 06X8         | 864                        | 15                                     | 3800                                             |
|                | 330         | 06X8         | 1056                       | 20                                     | 2800                                             |
|                | 470         | 06A1         | 1505                       | 16                                     | 4000                                             |
|                | 470         | 08X8         | 1505                       | 16                                     | 4000                                             |
|                | 470         | 08A2         | 1505                       | 10                                     | 5230                                             |
|                | 470         | 1010         | 1505                       | 10                                     | 4350                                             |
|                | 470         | 10A2         | 1505                       | 10                                     | 6100                                             |
|                | 560         | 06A1         | 1792                       | 20                                     | 3500                                             |
|                | 560         | 08A2         | 1792                       | 14                                     | 4950                                             |
|                | 680         | 08A2         | 2176                       | 10                                     | 5230                                             |
|                | 820         | 08A2         | 2624                       | 10                                     | 5230                                             |
|                | 1000        | 08A6         | 3200                       | 10                                     | 6100                                             |
|                | 1000        | 10A2         | 3200                       | 12                                     | 5400                                             |
|                | 1200        | 10A2         | 3840                       | 10                                     | 6100                                             |
|                | 1500        | 08A6         | 4800                       | 10                                     | 6100                                             |
|                | 2200        | 10B0         | 7040                       | 8                                      | 8100                                             |
| 20<br>(23)     | 330         | 06A0         | 1320                       | 16                                     | 3460                                             |
|                | 390         | 0811         | 1560                       | 14                                     | 4970                                             |
|                | 470         | 08A2         | 1880                       | 14                                     | 4970                                             |
|                | 680         | 08A6         | 1360                       | 16                                     | 4650                                             |
| 25<br>(28.8)   | 330         | 10A2         | 1650                       | 16                                     | 5100                                             |
|                | 470         | 08A2         | 2350                       | 16                                     | 4650                                             |
|                | 470         | 10A2         | 2350                       | 17                                     | 4650                                             |
|                | 560         | 08A6         | 2800                       | 14                                     | 5000                                             |
|                | 560         | 10A2         | 2800                       | 14                                     | 5100                                             |
|                | 680         | 08A6         | 3400                       | 14                                     | 5000                                             |
|                | 680         | 10A2         | 3400                       | 14                                     | 5100                                             |
|                | 820         | 08B0         | 4100                       | 13                                     | 5100                                             |
|                | 1000        | 10A6         | 5000                       | 13                                     | 5200                                             |
|                | 1500        | 10B0         | 7500                       | 13                                     | 5300                                             |
| 35<br>(40.3)   | 100         | 06X8         | 700                        | 35                                     | 2350                                             |
|                | 330         | 10A2         | 2310                       | 24                                     | 3400                                             |
|                | 470         | 08B0         | 3290                       | 20                                     | 4400                                             |
|                | 470         | 10A6         | 3290                       | 25                                     | 4000                                             |
|                | 560         | 10A6         | 3290                       | 23                                     | 4200                                             |
|                | 680         | 10B0         | 4760                       | 20                                     | 4800                                             |

\* 支持客户根据需求定制 Support Customer Customization According To Demand