

# Type PF 55 °C Photoflash, High-Energy, Long Life, 500 V, Aluminum



## High Energy, Long-Life Screw-Terminals Case Style

Type PF can withstand more than 100,000 full discharges in typical photoflash applications, and Type PF also delivers the higher energy density possible with a rated voltage of 500 V and higher capacitance values in screw-terminal style cans. Type PF is right for the highest flash-energy applications.

## Highlights

- 100,000 flash capability
- 1 joule per cc energy density

## Specifications

**Operating Temperature Range:** -20 °C to 55 °C

**Rated Voltage:** 500 Vdc

**Capacitance:** 600 to 2100  $\mu$ F -10% +20%

**Leakage Current:** 1 times C in  $\mu$ A maximum

**Dissipation Factor (Tan $\delta$ ):** 15% max. @ 25 °C & 120 Hz

**Discharge Life:** 100,000 minimum at 30 s interval

$\Delta$  Capacitance  $\pm$ 10%

ESR 150% of limit

DCL 150% of limit

**Shelf Life:** 500 h @ 55 °C

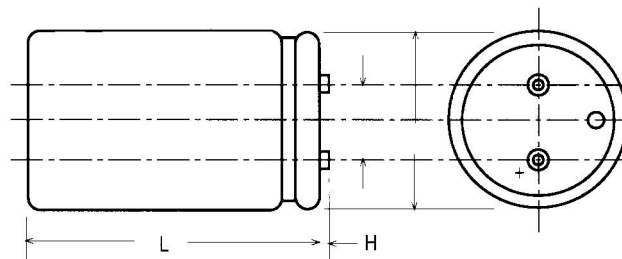
$\Delta$  Capacitance  $\pm$ 10%

ESR 150% of limit

DCL 150% of limit

**Vibration:** 10 to 55 Hz; 0.06" and 10 g max, 6 h vertical, 2 h. ea. 2 other planes

## Outline Drawings



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

| Terminal Styles | Code | H     |      | Thread |
|-----------------|------|-------|------|--------|
|                 |      | (in)  | (mm) |        |
| Low Post        | A    | 0.094 | 2.39 | 10-32  |
| High Post       | B    | 0.281 | 7.14 | 10-32  |

# Type PF 55 °C Photoflash, High-Energy, Long Life, 500 V, Aluminum Insulated Case Dimensions

| Case Code | Diam. (D) |        | Length (L) |       | Terminals (S) |       | Typical Weight |       |
|-----------|-----------|--------|------------|-------|---------------|-------|----------------|-------|
|           | ±0.031    | ±0.062 | ±0.062     | ±1.57 | ±0.015        | ±0.38 | oz             | g     |
|           | Inches    | mm     | Inches     | mm    | Inches        | mm    |                |       |
| AK        | 1.399     | 35.5   | 1.687      | 42.8  | 0.500         | 12.7  | 1.9            | 53.9  |
| AA        | 1.399     | 35.5   | 2.187      | 55.5  | 0.500         | 12.7  | 2.0            | 56.7  |
| AH        | 1.399     | 35.5   | 2.687      | 68.2  | 0.500         | 12.7  | 2.7            | 76.5  |
| AB        | 1.399     | 35.5   | 3.187      | 80.9  | 0.500         | 12.7  | 3.3            | 93.6  |
| AJ        | 1.399     | 35.5   | 3.687      | 93.6  | 0.500         | 12.7  | 3.8            | 107.7 |
| AC        | 1.399     | 35.5   | 4.187      | 106.3 | 0.500         | 12.7  | 4.4            | 124.7 |
| AD        | 1.399     | 35.5   | 4.687      | 119.0 | 0.500         | 12.7  | 5.1            | 144.6 |
| AE        | 1.399     | 35.5   | 5.187      | 131.7 | 0.500         | 12.7  | 5.7            | 161.6 |
| AF        | 1.399     | 35.5   | 5.687      | 144.4 | 0.500         | 12.7  | 6.4            | 181.4 |
| EA        | 1.774     | 45.1   | 2.187      | 55.5  | 0.750         | 19.1  | 2.7            | 76.5  |
| EH        | 1.774     | 45.1   | 2.687      | 68.2  | 0.750         | 19.1  | 3.8            | 107.7 |
| EB        | 1.774     | 45.1   | 3.187      | 80.9  | 0.750         | 19.1  | 5.1            | 144.6 |
| EJ        | 1.774     | 45.1   | 3.687      | 93.6  | 0.750         | 19.1  | 6.8            | 192.8 |
| EC        | 1.774     | 45.1   | 4.187      | 106.3 | 0.750         | 19.1  | 8.1            | 229.6 |
| ED        | 1.774     | 45.1   | 4.687      | 119.0 | 0.750         | 19.1  | 9.9            | 280.7 |
| EE        | 1.774     | 45.1   | 5.187      | 131.7 | 0.750         | 19.1  | 9.5            | 269.3 |
| EF        | 1.774     | 45.1   | 5.687      | 144.4 | 0.750         | 19.1  | 10.5           | 297.7 |
| BA        | 2.024     | 51.4   | 2.187      | 55.5  | 0.875         | 22.2  | 2.7            | 76.5  |
| BH        | 2.024     | 51.4   | 2.687      | 68.2  | 0.875         | 22.2  | 5.4            | 153.1 |
| BB        | 2.024     | 51.4   | 3.187      | 80.9  | 0.875         | 22.2  | 6.1            | 172.9 |
| BJ        | 2.024     | 51.4   | 3.687      | 93.6  | 0.875         | 22.2  | 6.8            | 192.8 |
| BC        | 2.024     | 51.4   | 4.187      | 106.3 | 0.875         | 22.2  | 8.2            | 232.5 |
| BD        | 2.024     | 51.4   | 4.687      | 119.0 | 0.875         | 22.2  | 9.6            | 272.1 |
| BE        | 2.024     | 51.4   | 5.187      | 131.7 | 0.875         | 22.2  | 10.3           | 292.0 |
| BF        | 2.024     | 51.4   | 5.687      | 144.4 | 0.875         | 22.2  | 13.0           | 368.5 |

## Part Numbering System

|             |   |                  |                      |                  |                                   |   |
|-------------|---|------------------|----------------------|------------------|-----------------------------------|---|
| <b>PF</b>   | <b>212</b>                                  | <b>V</b>         | <b>500</b>           | <b>BF</b>        | <b>2</b>                          | <b>B</b>  |
|             |   |                  |                      |                  |                                   |   |
| <b>Type</b> | <b>Capacitance</b>                          | <b>Tolerance</b> | <b>Rated Voltage</b> | <b>Case Code</b> | <b>Insulation</b>                 | <b>Terminals</b>  |
|             | <b>601 = 600 μF</b><br><b>212 = 2100 μF</b> | <b>-10 + 20%</b> | <b>Vdc</b>           |                  | <b>0 = none</b><br><b>2 = PVC</b> | <b>A = Low post, 10-32</b><br><b>B = High post, 10-32</b> |

## Ratings

| Cap. (μF)                      | Catalog Part Number | ESR Max. +25 °C, 120 Hz (Ω) | Diameter (mm) (in) | Length (mm) (in) |
|--------------------------------|---------------------|-----------------------------|--------------------|------------------|
| <b>500 Vdc (550 Vdc Surge)</b> |                     |                             |                    |                  |
| 600                            | PF601V500AJ2B       | 0.332                       | 35 1.38            | 92 3.63          |
| 800                            | PF801V500AD2B       | 0.249                       | 35 1.38            | 117 4.63         |
| 900                            | PF901V500EJ2B       | 0.221                       | 44 1.75            | 92 3.63          |
| 1000                           | PF102V500AF2B       | 0.199                       | 35 1.38            | 143 5.63         |
| 1200                           | PF122V500BJ2B       | 0.166                       | 51 2.00            | 92 3.63          |

| Cap. (μF)                      | Catalog Part Number | ESR Max. +25 °C, 120 Hz (Ω) | Diameter (mm) (in) | Length (mm) (in) |
|--------------------------------|---------------------|-----------------------------|--------------------|------------------|
| <b>500 Vdc (550 Vdc Surge)</b> |                     |                             |                    |                  |
| 1300                           | PF132V500ED2B       | 0.153                       | 44 1.75            | 117 4.63         |
| 1600                           | PF162V500BD2B       | 0.124                       | 51 2.00            | 117 4.63         |
| 1700                           | PF172V500EF2B       | 0.117                       | 44 1.75            | 143 5.63         |
| 2100                           | PF212V500BF2B       | 0.095                       | 51 2.00            | 143 5.63         |