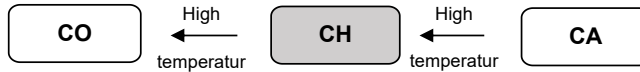
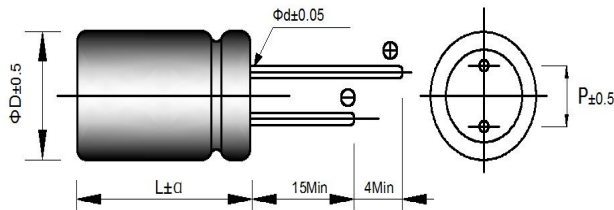
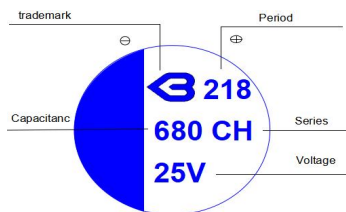


**CH Series**

- Low impedance, high ripple, high temperature resistant
- Load life of 2000 hours at 125°C
- RoHS Compliant

**◆ Specifications**

| Items                                                   | Characteristics                                                                                                                                                                                                                                             |                               |      |          |       |                |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------|----------|-------|----------------|
| Category                                                | -55 ~ +125℃                                                                                                                                                                                                                                                 |                               |      |          |       |                |
| Temperture Range                                        |                                                                                                                                                                                                                                                             |                               |      |          |       |                |
| Rated Voltage Range                                     | 2.5 ~ 25V                                                                                                                                                                                                                                                   |                               |      |          |       |                |
| Capacitance tolerance                                   | ±20%(M) (at 20℃,120Hz)                                                                                                                                                                                                                                      |                               |      |          |       |                |
| Leakage Current                                         | Is0.2CV or 500μA (The bigger)<br>After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.                                                                                                                               |                               |      |          |       |                |
| tanδ                                                    | Rated voltage (V)                                                                                                                                                                                                                                           | 2.5~4                         | 6.3  | 10~16    | 20~25 | (at 20℃,120Hz) |
| Dissipation Factor                                      | tanδ (Max.)                                                                                                                                                                                                                                                 | 0.18                          | 0.15 | 0.12     | 0.15  |                |
| Low Temperture Characteristics<br>(Max.Impedance Ratio) | Z(-25℃)/Z(+20℃)                                                                                                                                                                                                                                             | ≤1.25                         |      | (100KHz) |       |                |
|                                                         | Z(-55℃)/Z(+20℃)                                                                                                                                                                                                                                             | ≤1.25                         |      |          |       |                |
| Endurance                                               | The specifications listed below shall be met when the capacitors are restored to 20℃ after the rated voltage is applied for 2000 hours at 125℃                                                                                                              |                               |      |          |       |                |
|                                                         | Appearance                                                                                                                                                                                                                                                  | No significant damage         |      |          |       |                |
|                                                         | Capacitance change                                                                                                                                                                                                                                          | ≒ ±20% of the initial value   |      |          |       |                |
|                                                         | D.F.(tanδ)                                                                                                                                                                                                                                                  | ≒ 150% of the specified value |      |          |       |                |
|                                                         | ESR                                                                                                                                                                                                                                                         | ≒ 150% of the specified value |      |          |       |                |
|                                                         | Leakage current                                                                                                                                                                                                                                             | ≒ The specified value         |      |          |       |                |
| Damp Heat<br>(Steady State)                             | The specifications listed below shall be met when the capacitors are restored to 20℃ after the rated voltage is applied for 1000 hours at 60℃, 90% ~ 95% RH.                                                                                                |                               |      |          |       |                |
|                                                         | Appearance                                                                                                                                                                                                                                                  | No significant damage         |      |          |       |                |
|                                                         | Capacitance change                                                                                                                                                                                                                                          | ≒ ±20% of the initial value   |      |          |       |                |
|                                                         | D.F.(tanδ)                                                                                                                                                                                                                                                  | ≒ 150% of the specified value |      |          |       |                |
|                                                         | ESR                                                                                                                                                                                                                                                         | ≒ 150% of the specified value |      |          |       |                |
|                                                         | Leakage current                                                                                                                                                                                                                                             | ≒ The specified value         |      |          |       |                |
| (Surge Voltage)                                         | Surge Voltage=Rated voltage * 1.15(V)<br>The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through a protective resistor (R=1kΩ) and discharge for 5 minutes 30seconds |                               |      |          |       |                |
|                                                         | Appearance                                                                                                                                                                                                                                                  | No significant damage         |      |          |       |                |
|                                                         | Capacitance change                                                                                                                                                                                                                                          | ≒ ±20% of the initial value   |      |          |       |                |
|                                                         | D.F.(tanδ)                                                                                                                                                                                                                                                  | ≒ 150% of the specified value |      |          |       |                |
|                                                         | ESR                                                                                                                                                                                                                                                         | ≒ 150% of the specified value |      |          |       |                |
|                                                         | Leakage current                                                                                                                                                                                                                                             | ≒ The specified value         |      |          |       |                |

**◆ Dimensions (mm)**

| ΦD | 5              | 5.5 | 6.3 | 8   | 10  |
|----|----------------|-----|-----|-----|-----|
| P  | 2              | 2.5 | 2.5 | 3.5 | 5   |
| Φd | 0.5            | 0.5 | 0.5 | 0.6 | 0.6 |
| a  | L<16mm: 1.0    |     |     |     |     |
|    | 16≤L<30mm: 2.0 |     |     |     |     |
|    | L≥30mm: 3.0    |     |     |     |     |

**CH Series****◆ Standard Ratings**

| Rated voltage (V) | Rated capacitance(uF) | Case size<br>ΦD*L(mm) | ESR(mΩ)<br>at 20℃, 100 KHz | Rated ripple current<br>(mA <sub>rms</sub> /105℃/100kHz) | Rated ripple current<br>(mA <sub>rms</sub> /125℃/100kHz) |
|-------------------|-----------------------|-----------------------|----------------------------|----------------------------------------------------------|----------------------------------------------------------|
| 2.5               | 560                   | 8*12                  | 13                         | 4600                                                     | 1510                                                     |
|                   | 820                   | 8*12                  | 13                         | 4600                                                     | 1510                                                     |
|                   | 1200                  | 10*12                 | 13                         | 5400                                                     | 1700                                                     |
| 4                 | 560                   | 8*12                  | 13                         | 4600                                                     | 1510                                                     |
|                   | 820                   | 10*12                 | 13                         | 5400                                                     | 1700                                                     |
|                   | 1200                  | 10*12                 | 13                         | 5400                                                     | 1700                                                     |
| 6.3               | 470                   | 8*12                  | 15                         | 4300                                                     | 1400                                                     |
|                   | 680                   | 8*12                  | 15                         | 4300                                                     | 1400                                                     |
|                   | 820                   | 10*12                 | 12                         | 5400                                                     | 1700                                                     |
| 7.5               | 500                   | 6.3*8                 | 15                         | 4300                                                     | 1400                                                     |
|                   | 680                   | 8*8                   | 15                         | 4300                                                     | 1400                                                     |
|                   | 820                   | 10*12                 | 12                         | 5400                                                     | 1700                                                     |
| 10                | 220                   | 8*12                  | 18                         | 4000                                                     | 1200                                                     |
|                   | 470                   | 8*12                  | 18                         | 4000                                                     | 1200                                                     |
|                   | 560                   | 10*12                 | 14                         | 5400                                                     | 1600                                                     |
|                   | 820                   | 8*12                  | 12                         | 5100                                                     | 1600                                                     |
|                   | 1500                  | 10*12                 | 12                         | 5100                                                     | 1600                                                     |
| 16                | 180                   | 8*12                  | 18                         | 3500                                                     | 1100                                                     |
|                   | 220                   | 8*12                  | 18                         | 3500                                                     | 1100                                                     |
|                   | 330                   | 10*12                 | 16                         | 4600                                                     | 1510                                                     |
| 20                | 100                   | 8*12                  | 24                         | 3500                                                     | 1100                                                     |
|                   | 150                   | 10*12                 | 20                         | 4300                                                     | 1400                                                     |
| 25                | 22                    | 8*12                  | 65                         | 1200                                                     | 500                                                      |
|                   | 47                    | 8*12                  | 55                         | 1900                                                     | 790                                                      |
|                   | 220                   | 8*12                  | 40                         | 2100                                                     | 1050                                                     |
|                   | 270                   | 10*12                 | 40                         | 2100                                                     | 1050                                                     |
|                   | 330                   | 10*12                 | 32                         | 2750                                                     | 1375                                                     |
|                   | 390                   | 6.3*13                | 25                         | 2200                                                     | 1100                                                     |
|                   | 470                   | 6.3*15                | 25                         | 3000                                                     | 1500                                                     |
|                   | 680                   | 8*16                  | 20                         | 3300                                                     | 1650                                                     |

**◆ Rated Ripple Current Coefficient**

| Frequency(Hz) | 120Hz≤f<1kHz | 1kHz≤f<10kHz | 10kHz≤f<100kHz | 100kHz≤f<500kHz |
|---------------|--------------|--------------|----------------|-----------------|
| Coefficient   | 0.05         | 0.30         | 0.70           | 1.00            |