



CAHA SERIES: Surface Mount | SMD E-CAP Low ESR( Impedance)



FEATURES

- ◆ 105°C, 2000 hours assured
- ◆ Low Impedance
- ◆ RoHS Compliant

SPECIFICATIONS

| Item                                   | Performance                                                                                                      |                    |                                                           |      |      |        |    |                                                               |  |  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------|------|------|--------|----|---------------------------------------------------------------|--|--|
| Operating Temp. Range                  | -55°C ~ + 105°C                                                                                                  |                    |                                                           |      |      |        |    |                                                               |  |  |
| Capacitance Tolerance                  | ± 20% (120Hz, 20°C)                                                                                              |                    |                                                           |      |      |        |    |                                                               |  |  |
| Leakage Current (at 20•C)              | I=0.01CV or 3μA (whichever is greater) after 2 minutes, where C=rated capacitance in μF V=rated DC working Volts |                    |                                                           |      |      |        |    |                                                               |  |  |
| Dissipation Factor                     | Rated Voltage                                                                                                    | 6.3                | 10                                                        | 16   | 25   | 35     |    |                                                               |  |  |
| Tanδ at 120 Hz, 20°C                   | Tanδ (max)                                                                                                       | 0.30               | 0.26                                                      | 0.22 | 0.16 | 0.13   |    |                                                               |  |  |
| Low Temperature                        | Rated Voltage                                                                                                    |                    |                                                           | 6.3  | 10   | 16     | 25 | 35                                                            |  |  |
| Characteristics (at 120Hz)             | Impedance Ratio                                                                                                  | Z(-25°C) /Z(+20°C) |                                                           | 4    | 3    | 2      | 2  | 2                                                             |  |  |
|                                        |                                                                                                                  | Z(-40°C) /Z(+20°C) |                                                           | 8    | 5    | 4      | 3  | 3                                                             |  |  |
| Life Test                              | Test Time                                                                                                        |                    | Load Life                                                 |      |      |        |    | Shelf Life                                                    |  |  |
|                                        |                                                                                                                  |                    | 2000 Hrs                                                  |      |      |        |    | 1000 Hrs                                                      |  |  |
|                                        | Capacitance Change                                                                                               |                    | Within ±20% of initial value                              |      |      |        |    | Within ± 20% of initial value                                 |  |  |
|                                        | Dissipation Factor                                                                                               |                    | Less than 200% of specified value                         |      |      |        |    | Less than 200% of specified value                             |  |  |
|                                        | Leakage Current                                                                                                  |                    | Within specified value                                    |      |      |        |    | Within specified value                                        |  |  |
|                                        | Test Conditions                                                                                                  |                    | 20°C (after rated voltage applied for 2000 hours at 105°C |      |      |        |    | 20° C (after storage for 1000 hours at 105°C without voltage) |  |  |
| Ripple Current & Frequency Multipliers | VDC(V)                                                                                                           | Freq. (Hz)         | 50,60                                                     | 120  | 1K   | 10K up |    |                                                               |  |  |
|                                        | 6.3 ~ 35                                                                                                         |                    | 0.64                                                      | 0.8  | 0.93 | 1.0    |    |                                                               |  |  |
| Standards                              | Satisfies Characteristic W of JIS C 5141                                                                         |                    |                                                           |      |      |        |    |                                                               |  |  |

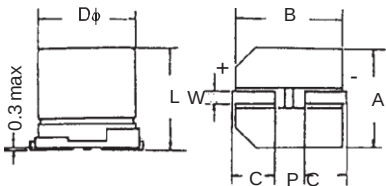
DIMENSION, IMPEDANCE & PERMISSIBLE RIPPLE CURRENT

Ripple Current mA/rms at 120 Hz, 105°C  
Impedance : at 100K Hz, 20°C

| VDC  |          | 6.3V (0J) |         |     | 10V (1A) |         |     | 16V (1C) |         |     | 25V (1E) |         |     | 35V (1V) |         |     |
|------|----------|-----------|---------|-----|----------|---------|-----|----------|---------|-----|----------|---------|-----|----------|---------|-----|
| μF   | Contents | φD x L    | Imp. mA |     | φD x L   | Imp. mA |     | φD x L   | Imp. mA |     | φD x L   | Imp. mA |     | φD x L   | Imp. mA |     |
| 47   | 476      |           |         |     |          |         |     |          |         |     |          |         |     | 8 x 10   | 0.45    | 369 |
| 100  | 107      |           |         |     |          |         |     |          |         |     | 8 x 10   | 0.45    | 369 | 10 x 10  | 0.25    | 553 |
| 150  | 157      |           |         |     |          |         |     |          |         |     |          |         |     | 8 x 10   | 0.45    | 369 |
| 220  | 227      |           |         |     | 8 x 10   | 0.45    | 369 |          |         |     | 10 x 10  | 0.25    | 553 |          |         |     |
|      |          |           |         |     |          |         |     |          |         |     | 8 x 10   | 0.45    | 369 |          |         |     |
| 330  | 337      | 8 x 10    | 0.45    | 369 |          |         | 553 | 10 x 10  | 0.25    | 553 |          |         |     |          |         |     |
|      |          |           |         |     |          |         |     | 8 x 10   | 0.45    | 369 |          |         |     |          |         |     |
| 470  | 477      | 8 x 10    | 0.45    | 369 | 10 x 10  | 0.25    | 553 | 8 x 10   | 0.45    | 369 |          |         |     |          |         |     |
|      |          |           |         |     | 8 x 10   | 0.45    | 369 |          |         |     |          |         |     |          |         |     |
| 820  | 827      |           |         |     | 10 x 10  | 0.25    | 553 |          |         |     |          |         |     |          |         |     |
| 1000 | 108      | 10 x 10   | 0.25    | 553 |          |         |     |          |         |     |          |         |     |          |         |     |

PAD SPACING AND DIAMETER

| φD±0.5 | L      | A±0.2 | B±0.2 | C±0.2 | W          | P±0.2 |
|--------|--------|-------|-------|-------|------------|-------|
| 8      | 10±0.5 | 8.4   | 8.4   | 3.0   | 0.7 to 1.1 | 3.1   |
| 10     | 10±0.5 | 10.4  | 10.4  | 3.3   | 0.7 to 1.1 | 4.7   |



PART NUMBER EXAMPLE

CAHA 476 M 1V T 080100