



SUPERCAPACITOR

Lead type

DLCAP™ DKA series



Sleeveless type

- Very low DCIR even at low and high temperature.
- Uses highly safe electrolyte.
- Ideal as a backup power supply for automotive electrical components.

◆ SPECIFICATIONS

| Items | Specifications | |
|-----------------------------|---|---|
| Operating Temperature | -40°C ~ +70°C | |
| Capacitance Tolerance | ±10% (K) (25°C) | |
| Temperature Characteristics | Capacitance Change | ≤ ±30% of the measured value at 20°C |
| | Internal Resistance Change | ≤ 600% of the internal resistance maximum value given in the ratings tables (-40°C) |
| Load Life Test | After the capacitors are subjected to the rated DC voltage at 70°C for 1000 hours, the following specifications shall be satisfied when they are restored to 20°C . | |
| | Capacitance Change | ≤ ±30% of the initial measured value at 20°C |
| | Internal Resistance Change | ≤ 200% of the internal resistance maximum value given in the ratings tables |
| | After the capacitors are subjected to the rated DC voltage at 60°C for 2000 hours, the following specifications shall be satisfied when they are restored to 20°C . | |
| | Capacitance Change | ≤ ±30% of the initial measured value at 20°C |
| | Internal Resistance Change | ≤ 200% of the internal resistance maximum value given in the ratings tables |
| Bias Humidity Test | After the capacitors are left at 60°C and 90 to 95%RH for 500 hours without voltage applied, the following specifications shall be satisfied when they are restored to 20°C . | |
| | Capacitance Change | ≤ ±30% of the initial measured value at 20°C |
| | Internal Resistance Change | ≤ 200% of the internal resistance maximum value given in the ratings tables |

◆ STANDARD RATINGS

● DKA series

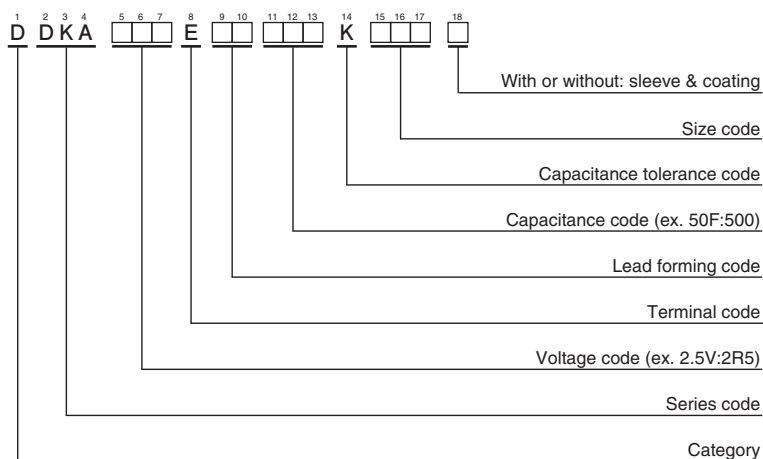
| Rated Voltage [V] | Capacitance | Nominal Case Size | | Internal Resistance | | Weight*1 [g] | Energy Storage*2 [Wh] | Part No. | Note*3 |
|-------------------|------------------|-------------------|--------|---------------------|-----------|--------------|-----------------------|--------------------|-----------------------|
| | Typ. (rated) [F] | φ D [mm] | L [mm] | Typ. [mΩ] | Max. [mΩ] | | | | |
| 2.5 | 50 | 18 | 50 | 11.0 | 13.2 | 18 | 0.04 | DDKA2R5ELL500KM50S | with sleeve (PET) |
| 2.5 | 50 | 18 | 50 | 11.0 | 13.2 | 18 | 0.04 | DDKA2R5ELL500KM50T | no sleeve, no coating |

* 1 Reference data

* 2 Energy Storage (Wh) is calculated based on 「電気及び電子機器用電気二重層キャパシタの輸送に関する手引書」 (Japanese only) by JEITA (It shows up to the second decimal place).

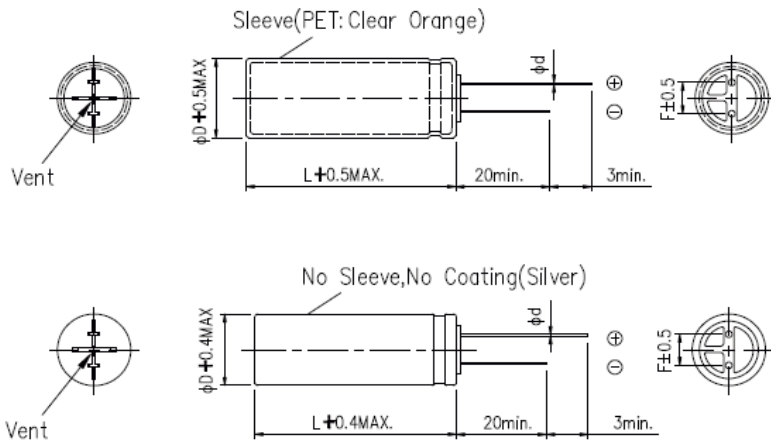
* 3 No sleeve no coating type and sleeve type are the basic specification.

◆ PART NUMBERING SYSTEM



DLCAP™ DKA series

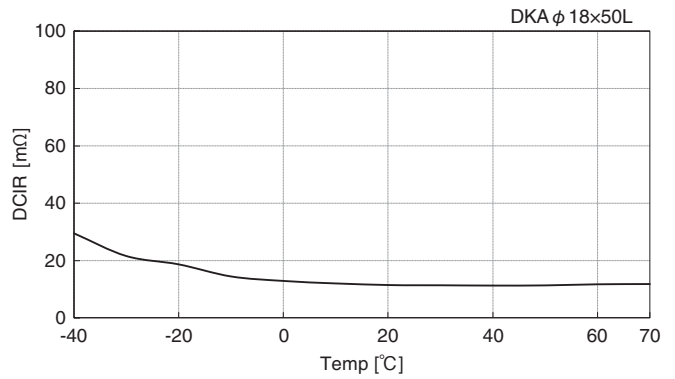
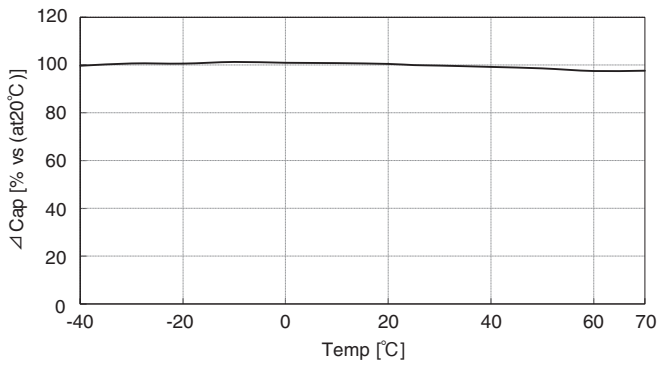
◆ DIMENSIONS [mm]



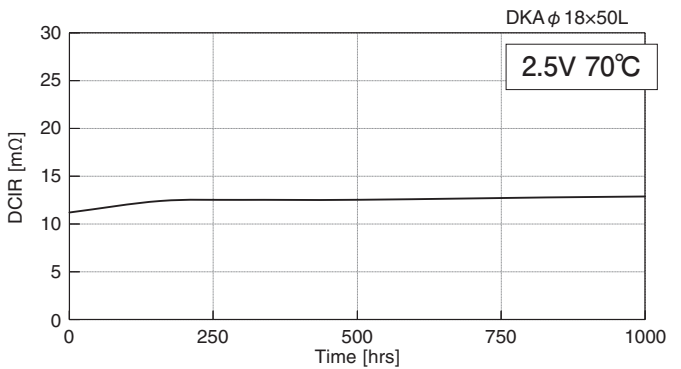
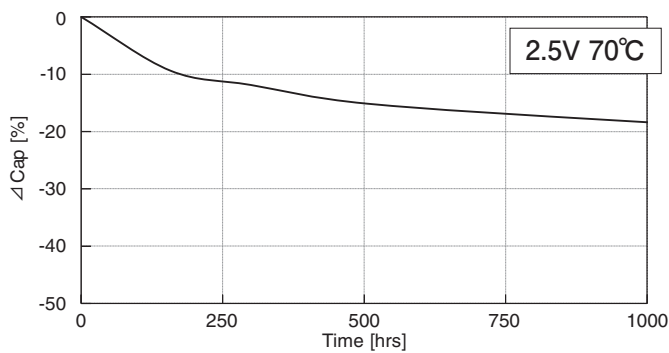
| | |
|---------|-----|
| L [mm] | 50 |
| F [mm] | 7.5 |
| φd [mm] | 0.8 |

Do not use sealing rubber's orientation of this drawing to identify polarity of the actual part.
Orientation of sealing rubber and safety vent are not associated.

◆ Temperature Dependence of Capacitance & DCIR



◆ 70°C Load Life Test



◆ 60°C Load Life Test

