



# SPECIFICATION FOR APPROVAL

## Film Capacitor for DC-Link application

**Customer Code:**

**Series / Type:**

**DKMJ-X 230 $\mu$ F  $\pm$ 10% 900VDC**

**Ordering code:**

**1GLZH723D900-01(2020600074)**

**Customer's P/N:**

**Date:**

**17-Oct-2019**

| FENGMING ELECTRONIC TECH. CO., LTD. |                               |                            | APPROVED BY |
|-------------------------------------|-------------------------------|----------------------------|-------------|
| Prepared                            | Checked                       | Approved                   |             |
| Linhao Zeng<br>17-Oct-2019          | Zhanteng Cheng<br>17-Oct-2019 | Carson Song<br>17-Oct-2019 |             |

### MANUFACTURER INFORMATION:

**Name:** FENGMING ELECTRONIC TECH. CO., LTD.

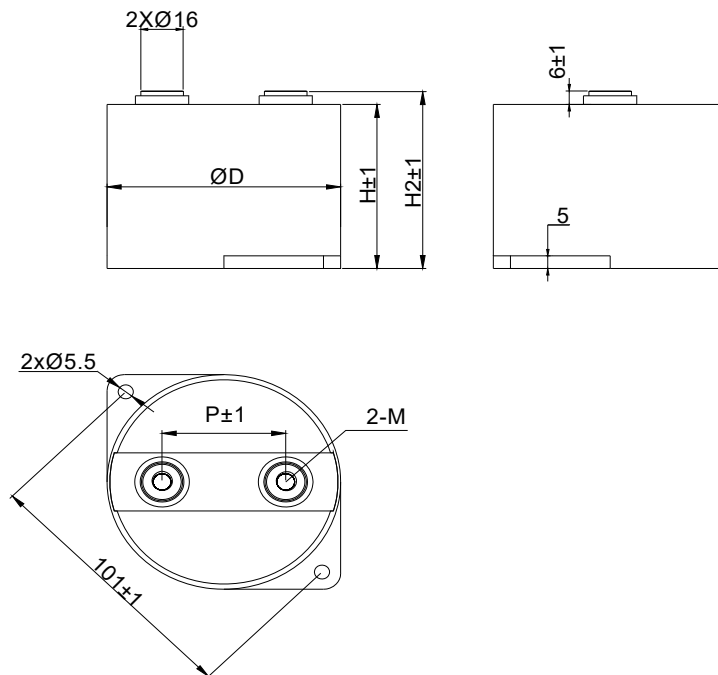
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## ■ OUTLINE DRAWING\_(mm)



## MARK

**BM** DKMJ-X  
SH 230 $\mu$ F  $\pm$ 10%  
UN 900V DC  
-40 $^{\circ}$ C ~ 85 $^{\circ}$ C Tracking  
Number

| C <sub>N</sub> ( $\mu$ F) | U <sub>N</sub> (VDC) | $\phi$ D (mm) | H (mm) | H2 (mm) | P  | M  |
|---------------------------|----------------------|---------------|--------|---------|----|----|
| 230                       | 900                  | 85            | 76     | 82      | 45 | M6 |

## ■ APPLICATIONS

Widely used in different kinds of electronic equipment DC link part for DC support, energy storage and filter.

## ■ FEATURES

- Metallized film, non-inductive structure
- Self-healing property
- High ripple current handling capabilities
- Low ESR, Low ESL
- Long lifetime

## ■ TEST CONDITIONS

Environment Temperature: T = +20  $^{\circ}$ C  $\pm$  10  $^{\circ}$ C

Environment Humidity: RH  $\leq$  65%

## ■ QUICK REFERENCE DATA

|                                        |                                                                                |                                            |
|----------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------|
| Reference standard                     |                                                                                | IEC 61071, GB/T17702                       |
| Rated capacitance                      | $C_N$                                                                          | 230 $\mu$ F                                |
| Capacitance tolerance                  |                                                                                | $\pm 10\%$                                 |
| Rated DC voltage                       | $U_N$                                                                          | 900 VDC                                    |
| Operating Temperature Range            |                                                                                | -40 °C to +85 °C $\ominus_{hs} \leq 85$ °C |
| Storage temperature range              |                                                                                | -40 °C to + 85 °C                          |
| Tangent of loss angle                  | $\tan \delta$                                                                  | $\leq 0.003$ (1kHz)                        |
| Test voltage between terminals         | $U_{t-t}$                                                                      | 1.5 x $U_{NDC}$ for 10s                    |
| Test voltage between terminal and case | $U_{t-c}$                                                                      | 3750V.AC                                   |
| Maximum ripple current                 | $I_{rms}$                                                                      | 60A @40°C                                  |
| Maximum peak current                   | $I_{peak}$                                                                     | 805A                                       |
| Maximum surge current                  | $\hat{I}_S$                                                                    | 2415A                                      |
| Voltage rise time                      | $dv/dt$                                                                        | 3.5V/ $\mu$ S                              |
| Equivalent series resistance           | ESR (typ)                                                                      | 2.2m $\Omega$                              |
| Equivalent series inductance           | $L_s$                                                                          | 30 nH                                      |
| Insulation resistance (100VDC for 60s) | IR                                                                             | $IR \times C_N \geq 5000s$                 |
| Thermal resistance                     | $R_{th}$                                                                       | 4.6                                        |
| Creepage distance                      |                                                                                | 33mm                                       |
| Clearance                              |                                                                                | 29mm                                       |
| Temporarily Overvoltage (per day)      | 1.1 x $U_N$ , 30% on load duration.                                            |                                            |
|                                        | 1.15 x $U_N$ for 30min                                                         |                                            |
|                                        | 1.2 x $U_N$ for 5min                                                           |                                            |
|                                        | 1.3 x $U_N$ for 1min                                                           |                                            |
|                                        | 1.5 x $U_N$ for 100ms each time, 1,000 times during the life of the capacitor. |                                            |
| Max.Torque of terminals                |                                                                                | 5N.m                                       |
| Failure rate                           |                                                                                | 50FIT                                      |

## ■ CHARACTERISTICS

