



CRC NEW ENERGY

APPROVAL SHEET

TO: 直流支撑电容 12uF ± 10% 450V

| Main Materials | | MARKING & OUTLINE DRAWING |
|---------------------|-------------------------------------|---------------------------|
| Construction | Materials | |
| Dielectric | Metallized Polypropylene Film | |
| Terminal | Tinned copper wire/plate | |
| Filling | Flame-retardant epoxy resin , white | |
| Case | Flame-retardant plastic case, grey | |

| Part No. | TYPE | Dimensions (mm) | | | | | | NOTE |
|----------|-----------------------|-----------------|----|----|------|----|-----|------|
| | | W | H | T | P | L | ΦD | |
| FC6107 | MKP-FC12 μ F K 450VDC | 41 | 26 | 15 | 37.5 | 15 | 1.0 | |
| | | | | | | | | |
| | | | | | | | | |

| CUSTOMER CONFIRMATION | | | CRC OFFER | | |
|-----------------------|-------------|------------|-------------|-------------|-------------|
| STAMP | APPROVED BY | CHECKED BY | STAMP | APPROVED BY | PREPARED BY |
| | | | | | 闫佳佳 |
| DATE | | | DATE | 2020-08-26 | |

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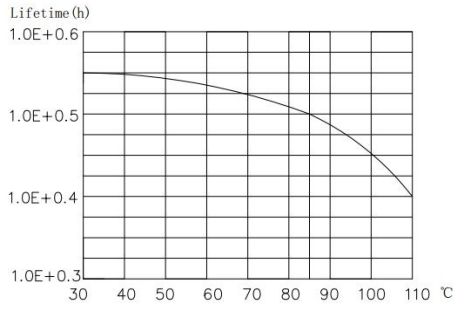
TEL: +86 - 0755 - 29948883 / 29948998 FAX: +86 - 0755 - 29948906 <http://www.csdcap.com>

Technical data

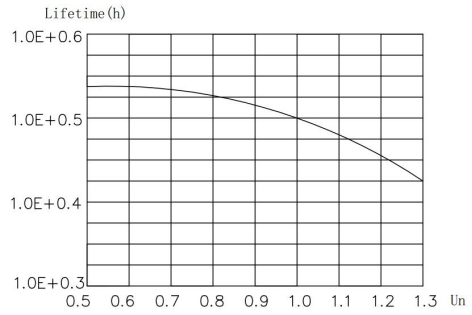
| Items | Symbols | Values | | | | | |
|---|--------------------|---|------------------------------|---------------------|-------------------|-------------------|---|
| Rated capacitance | C_N | $12\mu\text{F} \pm 10\%$ | | | | | |
| Rated voltage | U_N | 450V.DC | | | | | |
| Non-recurrent surge voltage | U_s | 750V.DC | | | | | |
| Maximum current | I_{rms} | 7A | | | | | |
| Maximum peak current | \hat{I} | 100A | | | | | |
| Maximum surge current | I_S | 300A | | | | | |
| Series resistance | R_S | $\leq 18.5\text{m}\Omega$ | | | | | |
| Tangent of the loss | $\tan \delta$ | $\leq 0.0015(100\text{Hz})$ | | | | | |
| Insulation Resistance | $C \times R_{is}$ | $\geq 5000\text{S}$ | | | | | |
| Self inductance | L_e | $\leq 30\text{nH}$ | | | | | |
| Lowest operating temperature | Θ_{min} | -40°C | | | | | |
| Maximum operating temperature | Θ_{max} | 105°C | | | | | |
| Storage temperature | $\Theta_{storage}$ | $-40^\circ\text{C} \sim 105^\circ\text{C}$ | | | | | |
| Operating humidity | RH | 0~95% | | | | | |
| Service life | | 100000h | | | | | |
| Failure quota | | <100Fit | | | | | |
| Test data | | | | | | | |
| Voltage test between terminals | V_{tt} | 700V.DC/10S | | | | | |
| | 过电压 | <table border="1"> <tbody> <tr> <td>1.1 UN (30% of on-load-dur.)</td> </tr> <tr> <td>1.15 UN (30min/day)</td> </tr> <tr> <td>1.2 UN (5min/day)</td> </tr> <tr> <td>1.3 UN (1min/day)</td> </tr> <tr> <td>1.5 UN (30ms every time, 1 000times during the life of the capacitor)</td> </tr> </tbody> </table> | 1.1 UN (30% of on-load-dur.) | 1.15 UN (30min/day) | 1.2 UN (5min/day) | 1.3 UN (1min/day) | 1.5 UN (30ms every time, 1 000times during the life of the capacitor) |
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| 1.5 UN (30ms every time, 1 000times during the life of the capacitor) | | | | | | | |
| Operating altitude | | | | | | | |
| | | 2000m (max) | | | | | |

Electrical Characteristics of Film Capacitor

1. Lifetime Expectancy

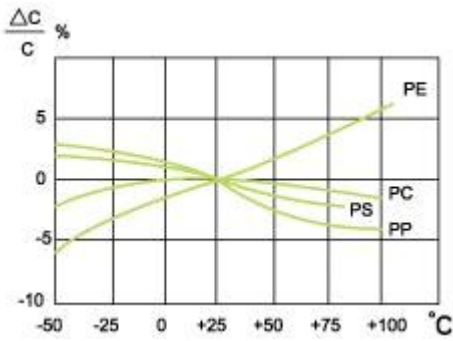


Life time Expectancy of charge temperature

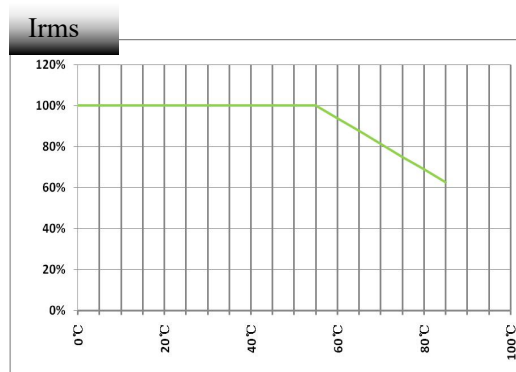


Life time Expectancy of charge voltage

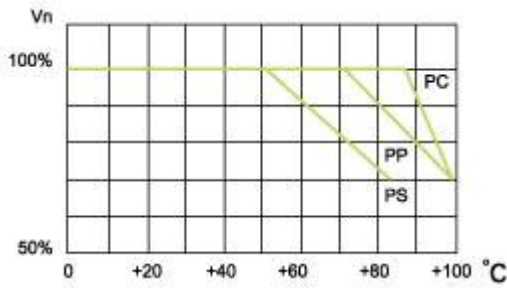
2. Temperature Characteristics



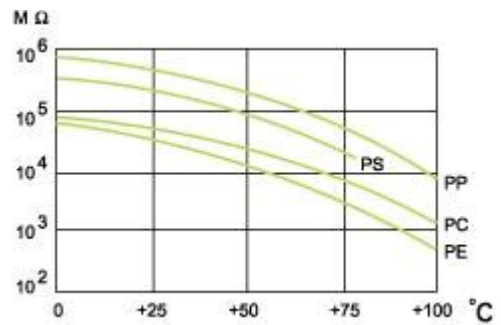
Capacitance vs. Temperature



Operation current vs. Temperature

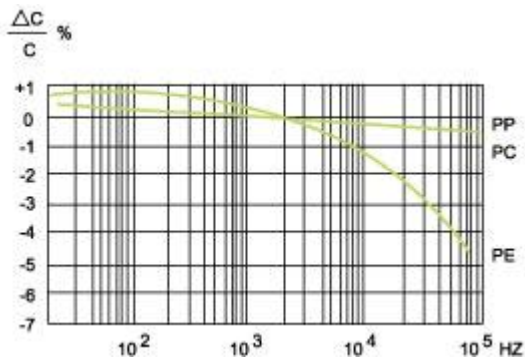


Operation voltage vs. Temperature

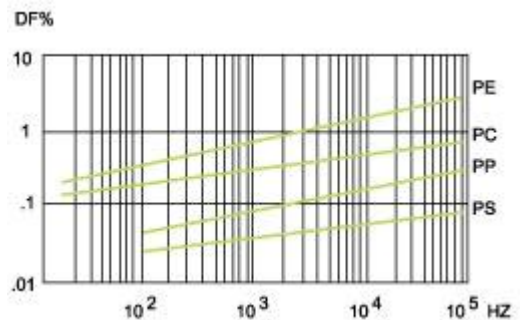


(CR value) IR vs. Temperature

3. Frequency Characteristics



Capacitance vs. Frequency



Dissipation Factor vs. Frequency

