

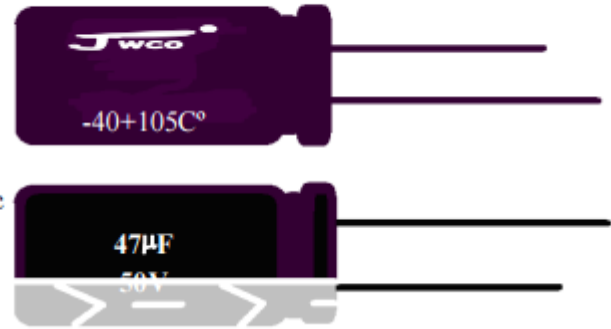
# JWCO® KM Series

## KM Series 105°C

### Features

- ◆ Used in communication equipments, switching power supply, etc
- ◆ Load life 2000 hours at 105°C
- ◆ Safety vent construction design

### Specifications



Item	Performance Characteristics																																																											
Operating Temperature Range	-40to+105°C	-40to+105°C																																																										
Rated Voltage Range	6.3to100VDC	160to450VDC																																																										
Capacitance Range	0.1to4700µ F	0.47to220µ F																																																										
Capacitance Tolerance	±20% (100Hz or 120Hz, +20°C)																																																											
Leakage Current (+20°C, max)	$I \leq 0.01CV$ or $3(\mu A)$ After 1minutes, whichever is greater measured with rated working voltage applied	$I \leq 0.03CV+10(\mu A)$ After 1minutes, whichever is greater measured with rated working voltage applied																																																										
Dissipation Factor (tgδ)	<table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>D.F(%)</td> <td>22</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> <td>12</td> <td>12</td> <td>12</td> <td>15</td> <td>15</td> <td>17</td> </tr> </tbody> </table>															Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	D.F(%)	22	20	16	14	12	10	9	8	12	12	12	15	15	17															
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For capacitance 1000µ F, Add 2% per another 1000µ F (100Hz or 120Hz, +20°C)																																																												
Low Temperature Characteristics (120Hz)	Impedance ratio ,max																																																											
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capacitance>1000µ F , and 0.5% per another 1000µ F for Z-25°C/Z+20°C, add 1% per another 1000µ F for Z-40°C /Z+20°C																																																												
Load Life	Test conditions																																																											
	Duration time: 2000hours																																																											
	Ambient temperature: +105°C																																																											
	Applied voltage: Rated Working Voltage(DVC)																																																											
	After test requirements: Resumde 16 hours at normal temperature																																																											
	Capacitance change: ≤20% of the initial measured value																																																											
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# Precautions

## Note the use of electrolytic capacitors:

### 1 Polarity

Aluminum electrolytic capacitors generally have polarity reverse polarity electrolytic capacitor is a short circuit caused damage and leakage, and therefore does not recognize when the polarity of the electrical loop or converted for use in the design of the loop polarity, please Optional polar electrolytic capacitors.

### 2 Overload

Do not over-voltage is applied continuously. When the voltage overload electrolytic capacitor leakage current will rapidly increase, so electrolytic capacitors should not exceed the rated working voltage.

### 3 temperature and lifetime

Temperature electrolytic capacitors do not exceed the maximum temperature of the setting range. Life electrolytic capacitors depends on the temperature of the electrolytic capacitors in general use when the temperature decreases 10 °C, its life is doubled, so the electrolytic capacitor should be used at lower temperatures as much as possible.

### 4. Proof Kong

An electrolytic capacitor using explosion proof design hole opening side space should be maintained at least 3 mm and the distance on the other institutions, such conditions are not satisfied,

Explosion hole will not work properly.

## 5. Ripple current

Do not apply more than the rated maximum allowable ripple current value of ripple current.

When applied to a large electrolytic capacitor ripple current of a large increase in the temperature will cause degradation of the electrical characteristics of electrolytic capacitors and breakage, if necessary, impose more of a fixed value of ripple current requirements, consult factory staff.

## 6 discharge

Frequent and rapid charging and discharging the capacitor will make the abnormal temperature rise, causing leakage current increases, reduced capacity, and sometimes cause damage to the product, consult factory workers such as charge and discharge characteristics when there are special requirements.

## 7 electrolytic storage capacitor

When the electrolytic capacitor after a long period after the placement, which usually tends to increase the leakage current. Therefore, the use of electrolytic capacitors place a long time after the previous post, you must first make the electrical characteristics applying a fixed voltage returns to normal; such as when stored for longer than six months or more, please protect the resistance of 1 k $\Omega$  series of row after it sustained load fixed Operating voltage 30 minutes. Also electrolytic capacitors should be stored at room temperature and normal humidity of the environment.

## 8 Solder

Improper soldering temperature and time can cause abnormal contraction of the surface of the hose rupture, and sometimes also by high-temperature thermal conductivity to the terminal pin and internal sub-prime adversely affect the product, and therefore must be taken to avoid excessive temperatures and too long for the solder .

#### 9. Mechanical strength of the guide pin and terminal

Do not apply excessive force on the outside of the guide pin and terminals. Do not flip electrolytic capacitors have been soldered to the PC board, not to lift or move the entire PC board as a springboard to electrolytic capacitors.

#### 10 The substrate cleaning after soldering

Such as the use of halogenated organic solvents to wash the substrate, the solvent may penetrate into the interior of electrolytic capacitors cause corrosion.

#### 11 Casing material

General use of plastic materials, mostly plastic sleeve (PVC), such as plastic tubes immersed in xylene or toluene and then placed under high temperatures, will produce rupture phenomenon also lost the insulation function.

12 of the Company's product quality according to JIS - C - 5 1 4 1 W standard assessment test methods according to their reliability specification JIS-C-5102's as a benchmark.

13. The Company in accordance with the provisions of the Montreal agreement, on the production process does not use drugs destroy the ozone layer.