

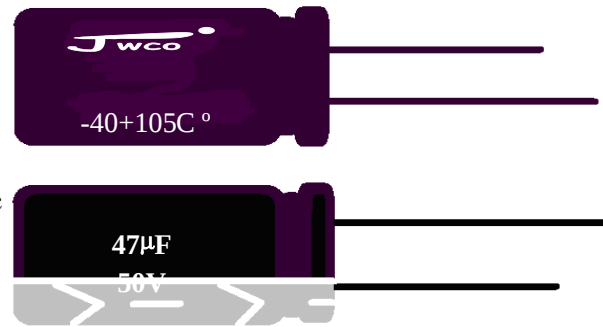
JWCO® KM Series

KM Series 105°C

Features

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

Specifications



Item	Performance Characteristics															
Operating Temperature Range	-40to+105℃								-40to+105℃							
Rated Voltage Range	6.3to100VDC								160to450VDC							
Capacitance Range	0.1to4700μ F								0.47to220μ F							
Capacitance Tolerance	±20%（100Hz or 120Hz， +20℃）															
Leakage Current （+20℃， max）	I ≤ 0.01CV or 3(μ A) After1minutes, whichever is greater measured with rated working voltage applied								I ≤0.03CV+10(μ A) After 1minutes, whichever is greater measured with rated working voltage applied							
Dissipation Factor （tgδ ）	WorkingVoltabe (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
	For capacitance1000μ F,Add 2%per another 1000μ F (100Hz or 120Hz， +20℃)															
Low Temperature Characteristics （120Hz）	Impedance ratio ,max															
	Working Voltage(VDC)		6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
	Z - 25℃ / Z+20 ℃		4	3	2	2	2	2	2	2	2	2	3	5	6	15
	Z - 40℃ / Z+20 ℃		8	6	4	3	3	3	3	3	-	-	-	-	-	-
capacitance>1000μ F , and 0.5% per another 1000μ F for Z-25℃/Z+20℃, add 1% per another 1000μ F for Z-40℃ /Z+20℃																
Load Life	Test conditions															
	Duration time: 2000hours															
	Ambient timperature: +105℃															
	Applied voltage: Rated Working Voltage(DVC)															
	After test requirements: Resumde 16 hours at normal temperature															
	Capacitance change:≤20% of the initial measured value															
	Dissipation Factor:≤200% of the initial specified value															
	Leakage Current:≤The initial specified value															
Shelt Life	Test conditions															
	Duration time: 1000hours															
	Ambient temperature:+105℃															
	Applied voltage: None															
	After test requirements: Resumed 16 hours at normal timperature															
	Capacitance change:≤20% of the initial measured value															
	Dissipation Factor:≤200% of the initial specified value															
	Leakage Current:≤200% of the initial specified value															

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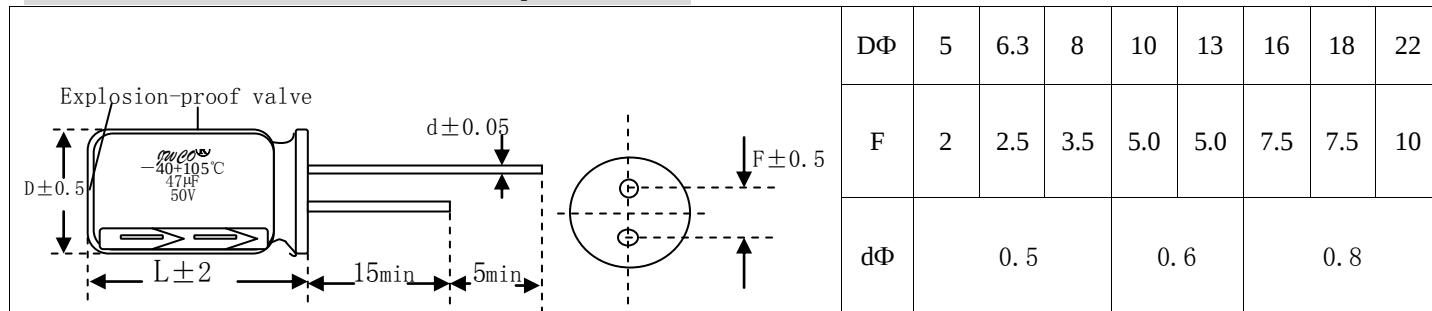
Multiplier for ripple current vs.frequency

(μ F) / Hz	60(50)	120	400	1K	10K	50K~100K
≤ 10	0.8	1	1.30	1.30	1.65	1.70
10~100	0.8	1	1.23	1.23	1.48	1.53
100~1000	0.8	1	1.16	1.16	1.35	1.38
>1000	0.8	1	1.11	1.11	1.25	1.28

Multiplier for ripple current vs.temperature

°C	45	60	70	85	105
	2.10	1.90	1.40	1.25	1.00

Diagram of Dimension ($\geq D\Phi 8$ has proof valve)



Sleeve logo Description:

JWCO®	--	-40+105°C	47UF	50V	-	-
LOGO	--	Temperature	Nominal capacity	Operating Voltage	-	-

Case Size

D x L(mm)

μ F \ WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
0.1						5x11	5x11	5x11						
0.22						5x11	5x11	5x11						
0.33						5x11	5x11	5x11						
0.47						5x11	5x11	5x11	5x11	5x11	5x11	6.3x11	6.3x11	8x12
1						5x11	5x11	5x11	6.3x12	6.3x12	6.3x12	8x12	6.3x12	8x12
2.2						5x11	5x11	5x11	6.3x12	6.3x12	6.3x12	8x12	8x12	8x12
3.3						5x11	5x11	5x11	6.3x12	6.3x12	8x12	8x12	8x12	8x16
4.7						5x11	5x11	5x11	6.3x12	8x12	8x12	8x12	10x13	10x13
6.8						5x11	5x11	5x11	6.3x12	8x12	8x12	8x12	10x13	10x17
10			5x11	5x11	5x11	5x11	6.3x12	6.3x11	8x12	10x13	10x17	10x17	10x17	10x20
15			5x11	5x11	5x11	5x11	6.3x12	6.3x12	8x12	10x13	10x17	10x15	10x17	10x20
22		5x11	5x11	5x11	5x11	6.3x11	6.3x12	8x12	10x20	10x17	10x20	13x21	13x21	16x25
33	5x11	5x11	5x11	5x11	5x11	6.3x12	8x12	10x13	10x20	13x20	13x25	16x25	16x18	16x30
47	5x11	5x11	5x11	6.3x12	6.3x12	6.3x12	8x12	10x16	13x25	13x25	13x25	13x25	16x25	16x30
68	5x11	5x11	5x11	6.3x12	6.3x12	6.3x12	8x12	10x16	13x25	13x25	13x25	13x25	16x25	16x30
82	5x11	5x11	5x11	6.3x12	6.3x12	8x12	10x16	13x20	16x25	16x32	16x32	18x36	18x32	
100	5x11	5x11	5x11	6.3x12	6.3x12	8x12	10x16	13x20	16x25	16x32	16x32	18x36	18x32	
120	5x11	6.3x12	6.3x12	6.3x12	8x12	10x13	10x16	13x20	16x25	16x32	16x32	18x36	18x36	
150	6.3x12	6.3x12	6.3x12	8x12	8x12	10x14	10x20	13x25	13x36	16x36	18x36	22x26	22x36	
220	6.3x12	6.3x12	6.3x12	8x12	8x12	10x16	10x20	16x25	16x36	18x41	18x41			
330	8x12	8x12	8x12	8x12	10x16	10x20	13x20	16x32						
470	8x12	8x12	8x12	10x16	10x17	13x20	13x25	16x36						
820	8x12	8x12	8x14	10x16	10x25	13x25	16x25	18x41						
1000	8x12	8x12	8x16	10x17	13x25	13x25	16x32	18x41						
2200	10x20	10x20	13x20	13x21	16x32	18x36	18x41							
3300	10x25	13x20	13x25	16x26	18x36	18x30								

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 Ω 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.