

# JACKCON Electrolytic Capacitors

## LMK Series 105 °C迷你型製品系列

### Features

- Design for space-saving and high density insertion.
- Applications: VTR , car radio, car stereos, charger, etc.



### Specifications

Item	Performance Characteristics																											
Operating Temperature Range	-40 to +105°C																											
Rated voltage Range	6.3 to 50 VDC																											
Capacitance Range	0.1 to 470 uF																											
Capacitance Tolerance	±20%(120Hz, +20 °C)																											
Leakage Current(+20°C , max.)	1 ≤ 0.01 CV or 3(uA) After 1 minute whichever is greater measured with rate working voltage applied.																											
Dissipation Factor(tan δ)	<table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>D.F.(%)max</td> <td>35</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> </tr> </tbody> </table> (+20 °C , at 120Hz )	Working Voltage (VDC)	4	6.3	10	16	25	35	50	63	D.F.(%)max	35	24	20	16	14	12	10	9									
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Low Temperature Characteristics (120Hz)	Impedance ratio max. <table border="1"> <thead> <tr> <th>Working Voltage (VDC)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>Z-25 °C/Z+20 °C</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40 °C/Z+20 °C</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	63	Z-25 °C/Z+20 °C	7	4	3	2	2	2	2	2	Z-40 °C/Z+20 °C	15	8	6	4	4	3	3	3
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Z-40 °C/Z+20 °C	15	8	6	4	4	3	3	3																				
Load Life	Test conditions Duration time :1000Hrs Ambient temperature:+105 °C Applied voltage: Rated C working voltage After test requirements at +20 °C Capacitance change : ≤± 20% of the initial measured value (4V: ≤± 30%) Dissipation factor: ≤ 200% of the initial specified value Leakage current: ≤ The initial specified value																											
Shelf Life	Test conditions Duration time :500 Hrs Ambient temperature:+105 °C Applied voltage: None After test requirements at +20 °C: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																											

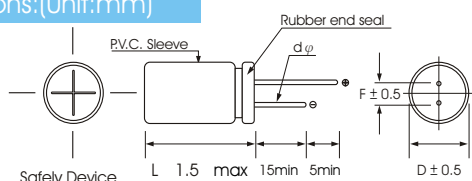
### Multiplier for Ripple Current vs. Frequency

CAP(uF)\Hz		50(60)	120	400	1K	10K	50K-100K
Multiplier	CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
	10 < CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
	100 < CAP ≤ 1000	0.8	1	1.16	1.25	1.35	1.38
	1000 < CAP	0.8	1	1.11	1.18	1.25	1.28

### Multiplier for ripple current vs. Temperature

Temperature °C	45	60	70	85	105
Multier	2.10	1.90	1.65	1.40	1.00

### Diagram of Dimensions:(Unit:mm)



D φ	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d φ	0.45		0.5	

LMK 01

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## Case Size

D x L (mm)

W.V. uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1-0.47	→				→	4X7
1	→				→	4X7
2.2	→				→	4X7
3.3	→				→	4X7
4.7	→				→	4X7
10	→	→	→	4X7	4X7 5X7	5X7
22	→	→	4X7	4X7 5X7	6X7	6X7
33	→	4X7	5X7	5X7	6X7	8X7
47	→	4X7	5X7	6X7	6X7	8X7
100	→	5X7	6X7	6X7 8X7	8X7	
220	5X7	6X7	6X7 8X7	8X9		
330	6X7	8X7	8X7			
470	8X7	8X7	8X9			

## Maximum Ripple Current

(mA, rms, 120Hz at 105 °C)

W.V. uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1-0.47	→				→	5
1	→				→	10
2.2	→				→	19
3.3	→				→	24
4.7	→				→	29
10	→	→	→	30	28, 30	32
22	→	→	37	40, 45	47	50
33	→	40	42	47	52	62
47	→	47	65	65	70	80
100	→	90	92	95, 135	150	-
220	120	125	185, 210	260	-	-
330	150	245	260	-	-	-
470	250	290	360	-	-	-