

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℃																											
Rated voltage Range	6.3 to 50 VDC																											
Capacitance Range	0.1 to 470 uF																											
Capacitance Tolerance	±20%(120Hz, +20 ℃)																											
Leakage Current(+20℃ , max.)	1 ≤0.01 CV or 3(μA) After 1 minute whichever is greater measured with rated working voltage applied.																											
Dissipation Factor(tan δ)	<table><tr><td>Working Voltage (VDC)</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><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></table> (+20 ℃ , 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><tr><td>Working Voltage (VDC)</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>Z-25 ℃/Z+20 ℃</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 ℃/Z+20 ℃</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></table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	63	Z-25 ℃/Z+20 ℃	7	4	3	2	2	2	2	2	Z-40 ℃/Z+20 ℃	15	8	6	4	4	3	3	3
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Z-40 ℃/Z+20 ℃	15	8	6	4	4	3	3	3																				
Load Life	Test conditions Duration time :1000Hrs Ambient temperature:+105 ℃ Applied voltage: Rated C working voltage After test requirements at +20 ℃ 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 ℃ Applied voltage: None After test requirements at +20 ℃: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																											

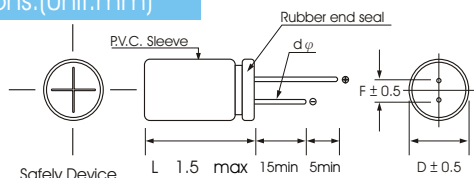
Multiplier for Ripple Current vs. Frequency

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

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	-	-	-