

L3M



- ◆ 105°C 2000~5000 Hours
- ◆ Low ESR, Flat Type, Large Capacitance
- ◆ RoHS Compliant
- ◆ AEC-Q200 Qualified, Please Consult Us For More Details

■ Specification

Items	Characteristics											
Operation Temperature Range	≤100V.DC -55°C ~ +105°C ; 160V.DC -40°C ~ +105°C											
Rated Voltage	6.3 ~ 160V.DC											
Capacitance Tolerance	±20% (25±2°C 120Hz)											
Leakage Current(µA)	6.3 ~ 100WV I ≤ 0.01CV or 3µA whichever is greater C:rated capacitance(µF) V:rated voltage(V) 2 minutes reading											
	160WV I ≤ 0.02CV+10(µA) C:rated capacitance(µF) V:rated voltage(V) 2 minutes reading											
Dissipation Factor (25±2°C 120Hz)	Rated Voltage(V)	6.3	10	16	25	35						
	tgδ	0.26	0.19	0.16	0.14	0.12						
	Rated Voltage(V)	50	63	80	100	160						
	tgδ	0.12	0.12	0.12	0.12	0.14						
For those with rated capacitance larger than 1000µF, when the rated capacitance is increased by 1000µF, then tgδ will be increased by 0.02												
Temperature Characteristics (120Hz)	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100	160	
	Z(-40°C)/Z(20°C)	3	3	3	3	3	3	5	5	5	5	
Endurance	After standard test time with applying the rated voltage with the rated ripple current in the oven at 105°C, the following specification shall be satisfied after 16 hours at 25±2°C.											
	Capacitance change	within±30% of the intial value										
	Dissipation Factor	Not more than 300% of the specified value										
	Leakage current	Not more than the specified value										
	Load life(hours)	≤Φ10 2000hrs					>Φ10 5000hrs					
Shelf Life At High Temperature	After leaving capacitors under no load at 105°C for 1000 hours, the following specification shall be satisfied at 25±2°C.											
	Capacitance change	within±20% of the intial value										
	Dissipation Factor	Not more than 200% of the specified value										
	Leakage current	Not more than 200% of the specified value										

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■ Standard Size

Voltage (V)	6.3			10			16			25		
Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)
22										4×5	2.00	160
33										4×5	2.00	160
47							4×5	2.00	160	5×5	0.72	240
68				4×5	2.00	160	5×5	0.72	240	5×5	0.72	240
100	4×5	2.00	160				5×5	0.72	240	6.3×5	0.52	300
150				5×5	0.72	240	6.3×5	0.52	300	6.3×7	0.32	600
220	5×5	0.72	240	6.3×5	0.52	300	6.3×5	0.52	300	6.3×7	0.32	600
330	6.3×5	0.52	300	6.3×7	0.32	600	6.3×7	0.32	600			
470	6.3×7	0.32	600	6.3×7	0.32	600				8×9	0.16	850
560												
680	6.3×7	0.32	600				8×9	0.16	850			
820										10×9	0.12	1190
1000				8×9	0.16	850	10×9	0.12	1190			
1500	8×9	0.16	850	10×9	0.12	1190				12.5×13	0.116	1420
2200	10×9	0.12	1190									

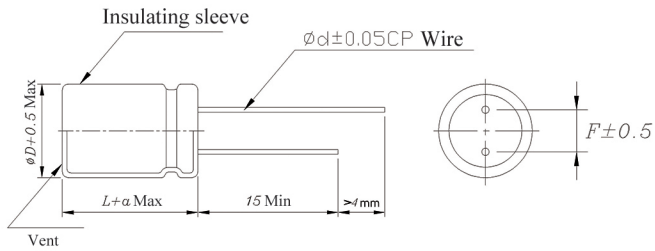
Voltage (V)	35			50			63			80		
Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)
10				4×5	4.60	85						
10				5×5	1.76	165						
22	4×5	2.00	160	5×5	1.76	165						
33	5×5	0.72	240									
47	5×5	0.72	240	6.3×5	1.36	195						
68	6.3×5	0.52	300									
100	6.3×5	0.52	300	6.3×7	0.68	350						
150	6.3×7	0.32	600									
220				8×9	0.36	670				12.5×13	0.36	1050
330	8×9	0.16	850	10×9	0.24	900						
470				12.5×13	0.24	1340	12.5×16	0.28	1250	16×16	0.20	1500
560	10×9	0.12	1190									
680							16×16	0.164	1740	16×20	0.132	2040
820							18×16	0.16	1880	18×20	0.126	2140
1000	12.5×14	0.116	1420	16×16	0.16	1820						
1200							16×20	0.108	2430			
1500				16×20	0.10	2440						

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■ Standard Size

Voltage (V)						
Items	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C100KHz)
100				12.5×16	4.60	1040
150	12.5×13	0.36	1050	16×20	3.28	1520
220	12.5×16	0.22	1250	18×20	2.58	2140
330	16×16	0.20	1500			
470	16×20	0.132	2040			
560	18×20	0.126	2140			

■ Standard Size (Unit: mm)



L<20	a=1.0
L≥20	a=2.0

Remark: capacitors with diameter more than 6.3 have safety vent

D	4	5	6.3	8	10	12.5	16	18
d	0.45	0.5(0.45)	0.5	0.6(0.5)	0.6	0.6	0.8	0.8
F	1.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5

■ Ripple Current Correction Factor

Frequency(Hz)	50	120	1K	≥10K
Coefficient	0.35	0.5	0.83	1.0