

MPD19

- ◆ 105°C 2000 Hours
- ◆ High Voltage (50Vmax)
- ◆ Low ESR And High Ripple Current
- ◆ RoHS Compliant (2011/65/EU)



■ Specification

Items	Characteristics	
Operation Temperature Range	-55°C~+105°C	
Rated Voltage	2~50V	
Capacitance Range	8.2~470μF 120Hz/20°C	
Capacitance Tolerance	±20%(120Hz/20°C)	
Dissipation Factor	Below the standard value(under frequency 120Hz/20°C)	
Leakage Current	I≤0.1CV under 20°C charging 2mins with rated voltage	
ESR	Below the standard value(under frequency 100KHz/20°C)	
Surge Voltage(V)	1.15times than rated voltage	
Endurance	After load rated voltage for 2000hours at 105°C, the following specification shall be satisfied after placing capacitor for 16 hours at 20°C	
	Capacitance change	Within±20% of the initial value
	Dissipation Factor	200% or less than the specified value
	Leakage current	Not more than the specified value
Humidity	Store the capacitor at 60°C under the condition of 90%~95%R.H with no load for 1000hrs, the following specifications shall be satisfied after placing capacitor for 16 hours at 20°C.	
	Capacitance change	-20%~+50% of the initial value
	Dissipation Factor	200% or less than the initial specified value
	Leakage current	Within the initial value

■ Marks

Capacitance(μF) Positive

Rated Voltage(V) Manufacturing code

Manufacturing Code Standard:
The 1st letter: Producing Month

Month	1	2	3	4	5	6	7	8	9	10	11	12
Code	A	B	C	D	E	F	G	H	J	K	L	M

Two number in the middle: Year
The last letter: last letter in its series

■ Dimension

Unit: mm

L±0.2	W±0.2	H±0.1	W1±0.1	P±0.2
7.3	4.3	1.9	2.4	1.3

■ Rated Ripple Current Temperature Correction Factor

Frequency(Hz)	T ≤ 45°C	45°C < T ≤ 85°C	85°C < T ≤ 105°C
Correction factor	1.0	0.7	0.25

The surface temperature of MLPC should be less than its Max. operating temperature

■ Rated Ripple Current Frequency Correction Factor

Frequency(Hz)	120Hz	1KHz	10KHz	100~300KHz
Correction factor	0.10	0.45	0.50	1.00

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■ Standard Size

Rated Voltage (V)	Capacitance (μ F)	Size D×L(mm)			L.C. (μ A,2min)	Tan δ 120Hz	ESR (m Ω 100kHz)	Ripple current (mA/r.m.s) 45°C100kHz	
		L	W	H					
2	82	7.3	4.3	1.9	16.4	0.06	15	5100	
	180	7.3	4.3	1.9	36	0.06	12	5600	
	220	7.3	4.3	1.9	44	0.06	9	6300	
	270	7.3	4.3	1.9	54	0.06	9	6300	
	330	7.3	4.3	1.9	66	0.06	9	6300	
		7.3	4.3	1.9	66	0.06	6	7500	
		7.3	4.3	1.9	66	0.06	4.5	8500	
	390	7.3	4.3	1.9	78	0.06	9	6300	
		7.3	4.3	1.9	78	0.06	6	7500	
		7.3	4.3	1.9	78	0.06	4.5	8500	
	470	7.3	4.3	1.9	94	0.06	9	6300	
		7.3	4.3	1.9	94	0.06	6	7500	
7.3		4.3	1.9	94	0.06	4.5	8500		
2.5	68	7.3	4.3	1.9	17	0.06	15	5100	
	150	7.3	4.3	1.9	38	0.06	12	5600	
	220	7.3	4.3	1.9	55	0.06	9	6300	
	227	7.3	4.3	1.9	68	0.06	9	6300	
	330	7.3	4.3	1.9	83	0.06	9	6300	
		7.3	4.3	1.9	83	0.06	6	7500	
		7.3	4.3	1.9	83	0.06	4.5	8500	
	390	7.3	4.3	1.9	98	0.06	9	6300	
		7.3	4.3	1.9	98	0.06	6	7500	
		7.3	4.3	1.9	98	0.06	4.5	8500	
	4	47	7.3	4.3	1.9	18.8	0.06	20	4200
		100	7.3	4.3	1.9	40	0.06	12	5600
150		7.3	4.3	1.9	60	0.06	9	6300	
		7.3	4.3	1.9	60	0.06	7	7000	
220		7.3	4.3	1.9	88	0.06	9	6300	
		7.3	4.3	1.9	88	0.06	7	7000	
270		7.3	4.3	1.9	108	0.06	9	6300	
		7.3	4.3	1.9	108	0.06	7	7000	
6.3	33	7.3	4.3	1.9	21	0.06	20	4200	
	68	7.3	4.3	1.9	43	0.06	15	5100	
	100	7.3	4.3	1.9	63	0.06	12	5600	
	150	7.3	4.3	1.9	95	0.06	9	6300	
	180	7.3	4.3	1.9	113	0.06	9	6300	
	220	7.3	4.3	1.9	139	0.06	9	6300	
10	22	7.3	4.3	1.9	22	0.06	20	4200	
	39	7.3	4.3	1.9	39	0.06	18	4600	
	68	7.3	4.3	1.9	68	0.06	15	5100	
	82	7.3	4.3	1.9	82	0.06	12	5600	
	100	7.3	4.3	1.9	100	0.06	10	5900	
16	15	7.3	4.3	1.9	24	0.06	70	2400	

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		L	W	H				
16	15	7.3	4.3	1.9	24	0.06	70	2400
	33	7.3	4.3	1.9	53	0.06	50	2850
	47	7.3	4.3	1.9	75	0.06	40	3200
	68	7.3	4.3	1.9	109	0.06	30	3500
	82	7.3	4.3	1.9	131	0.06	25	3800
	100	7.3	4.3	1.9	160	0.06	20	4200
20	10	7.3	4.3	1.9	20	0.06	80	2200
	22	7.3	4.3	1.9	44	0.06	65	2500
	33	7.3	4.3	1.9	66	0.06	45	3000
	47	7.3	4.3	1.9	94	0.06	35	3300
	56	7.3	4.3	1.9	112	0.06	30	3500
	68	7.3	4.3	1.9	136	0.06	25	3800
25	10	7.3	4.3	1.9	25	0.06	80	2200
	22	7.3	4.3	1.9	55	0.06	65	2500
	33	7.3	4.3	1.9	83	0.06	45	3000
	39	7.3	4.3	1.9	98	0.06	35	3300
	47	7.3	4.3	1.9	117.5	0.06	30	3500
	56	7.3	4.3	1.9	140	0.06	25	3800
	68	7.3	4.3	1.9	170	0.06	20	4200
35	15	7.3	4.3	1.9	53	0.06	60	2700
	22	7.3	4.3	1.9	77	0.06	50	2850
	33	7.3	4.3	1.9	115.5	0.06	30	3200
50	8.2	7.3	4.3	1.9	41	0.06	55	2700
	10	7.3	4.3	1.9	50	0.06	45	3000