

MPD28

- ◆ 105°C 2000 Hours
- ◆ High Voltage (50Vmax) High Capacitance(820μF max)
- ◆ 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	15~820μF 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

680
2.5 M18L

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	2.8	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

MPD28

■ 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	560	7.3	4.3	2.8	112	0.06	6	7500
		7.3	4.3	2.8	112	0.06	4.5	8500
	680	7.3	4.3	2.8	136	0.06	6	7500
		7.3	4.3	2.8	136	0.06	4.5	8500
	820	7.3	4.3	2.8	164	0.06	6	7500
		7.3	4.3	2.8	164	0.06	4.5	8500
2.5	470	7.3	4.3	2.8	118	0.06	6	7500
		7.3	4.3	2.8	118	0.06	4.5	8500
	560	7.3	4.3	2.8	140	0.06	6	7500
		7.3	4.3	2.8	140	0.06	4.5	8500
	680	7.3	4.3	2.8	170	0.06	6	7500
		7.3	4.3	2.8	170	0.06	4.5	8500
4	330	7.3	4.3	2.8	132	0.06	9	6300
	390	7.3	4.3	2.8	156	0.06	9	6300
	470	7.3	4.3	2.8	188	0.06	7	7000
6.3	270	7.3	4.3	2.8	170	0.06	9	6300
	330	7.3	4.3	2.8	208	0.06	7	7000
	390	7.3	4.3	2.8	246	0.06	7	7000
10	150	7.3	4.3	2.8	150	0.06	10	6800
	220	7.3	4.3	2.8	220	0.06	10	6800
16	120	7.3	4.3	2.8	192	0.06	20	5600
	150	7.3	4.3	2.8	240	0.06	15	5900
20	82	7.3	4.3	2.8	164	0.06	20	5600
	100	7.3	4.3	2.8	200	0.06	20	5600
25	82	7.3	4.3	2.8	205	0.06	25	3900
	100	7.3	4.3	2.8	250	0.06	25	3900
35	39	7.3	4.3	2.8	137	0.06	30	4300
	47	7.3	4.3	2.8	165	0.06	30	4300
50	15	7.3	4.3	2.8	53	0.06	45	3600