

# MPB19

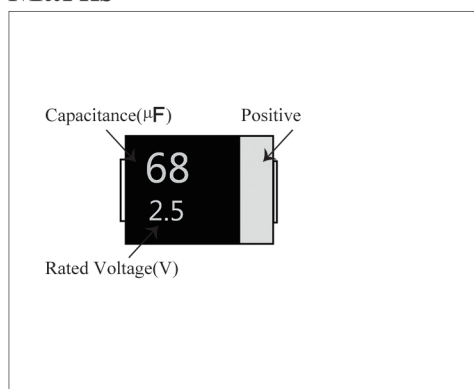
- ◆ 105°C 2000 Hours
- ◆ High Voltage ( 50Vmax )
- ◆ Miniature Size Series (3.5×2.8×1.9mm)
- ◆ Low ESR And High Ripple Current
- ◆ RoHS Compliant ( 2011/65/EU )



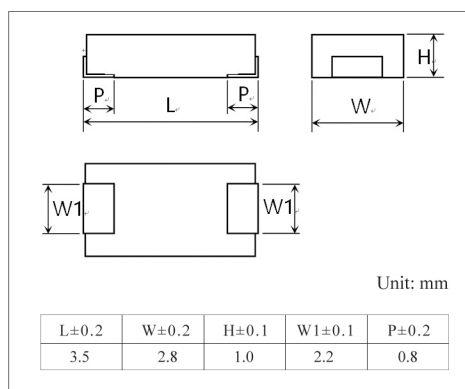
## ■ Specification

Items	Characteristics	
Operation Temperature Range	-55°C~+105°C	
Rated Voltage	2~50V	
Capacitance Range	1.8~82μF 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



## ■ Dimension



## ■ 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 ( $\mu$ F)	Size D×L(mm)			L.C. ( $\mu$ A,2min)	Tan $\delta$ 120Hz	ESR (m $\Omega$ 100kHz)	Ripple current (mA/r.m.s) 45°C100kHz
		L	W	H				
2	15	3.5	2.8	1.9	3	0.06	15	2000
	27	3.5	2.8	1.9	5	0.06	12	2200
	39	3.5	2.8	1.9	8	0.06	9	2400
	47	3.5	2.8	1.9	9	0.06	9	2400
	56	3.5	2.8	1.9	11	0.06	7	2800
	68	3.5	2.8	1.9	14	0.06	6	3000
	82	3.5	2.8	1.9	16	0.06	6	3000
2.5	15	3.5	2.8	1.9	4	0.06	15	2000
	27	3.5	2.8	1.9	7	0.06	12	2200
	39	3.5	2.8	1.9	10	0.06	9	2400
	47	3.5	2.8	1.9	12	0.06	9	2400
	56	3.5	2.8	1.9	14	0.06	6	3000
	68	3.5	2.8	1.9	17	0.06	6	3000
4	8.2	3.5	2.8	1.9	3	0.06	20	1700
	18	3.5	2.8	1.9	7	0.06	12	2200
	27	3.5	2.8	1.9	11	0.06	9	2400
	39	3.5	2.8	1.9	16	0.06	7	2800
	47	3.5	2.8	1.9	19	0.06	7	2800
6.3	5.6	3.5	2.8	1.9	4	0.06	20	1700
	15	3.5	2.8	1.9	9	0.06	15	2000
	18	3.5	2.8	1.9	11	0.06	12	2200
	27	3.5	2.8	1.9	17	0.06	9	2400
	33	3.5	2.8	1.9	21	0.06	9	2400
	39	3.5	2.8	1.9	25	0.06	9	2400
10	4.7	3.5	2.8	1.9	5	0.06	20	1700
	6.8	3.5	2.8	1.9	7	0.06	18	1800
	10	3.5	2.8	1.9	10	0.06	15	2000
	15	3.5	2.8	1.9	15	0.06	12	2200
	18	3.5	2.8	1.9	18	0.06	10	2300
16	2.7	3.5	2.8	1.9	4	0.06	70	1000
	5.6	3.5	2.8	1.9	9	0.06	50	1200
	10	3.5	2.8	1.9	16	0.06	30	1400
	15	3.5	2.8	1.9	24	0.06	20	1700
20	1.8	3.5	2.8	1.9	4	0.06	80	900
	3.9	3.5	2.8	1.9	8	0.06	70	1000
	5.6	3.5	2.8	1.9	11	0.06	45	1250
	8.2	3.5	2.8	1.9	16	0.06	35	1400
	12	3.5	2.8	1.9	24	0.06	25	1600
25	1.8	3.5	2.8	1.9	5	0.06	80	900
	3.9	3.5	2.8	1.9	10	0.06	65	1000
	5.6	3.5	2.8	1.9	14	0.06	45	1250
	8.2	3.5	2.8	1.9	21	0.06	35	1400

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Rated Voltage (V)	Capacitance ( $\mu$ F)	Size D×L(mm)			L.C. ( $\mu$ A,2min)	Tan $\delta$ 120Hz	ESR (m $\Omega$ 100kHz)	Ripple current (mA/r.m.s) 45°C100kHz
		L	W	H				
35	2.7	3.5	2.8	1.9	9	0.06	50	1200
	4.7	3.5	2.8	1.9	16	0.06	40	1300
50	1.8	3.5	2.8	1.9	9	0.06	55	1150
	2.7	3.5	2.8	1.9	14	0.06	40	1300