

## MW Series

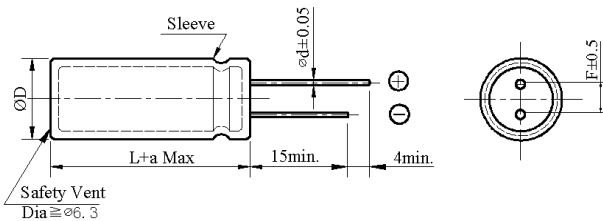
- Low ESR
- Load life 2,000 hours at 105°C



### ◆ SPECIFICATIONS

Item	Performance Characteristics			
Category Temperature Range	-25 ~ +105°C			
Working Voltage Range	160 ~ 450Vdc			
Capacitance Range	33 ~ 560 µF			
Capacitance Tolerance	±20% (at 25°C and 120Hz)			
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	160 ~ 450		
	tanδ(Max)	0.15		
Leakage Current	I=0.03CV + 10µA I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes			
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	160~250	400	420 ~450
	Z(-25°C)/Z(+20°C)	3	5	6
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25 °C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105 °C.			
	Capacitance change	≅ ±20% of the initial value		
	Dissipation factor(tanδ)	≅ 200% of the specified value		
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.			
	Capacitance change	≅ ±20% of the initial value		
	Dissipation factor(tanδ)	≅ 200% of the specified value		
Leakage current	≅ 200% of the specified value			
	Others			
Conforms to JIS-C-5101-4 (1998), characteristic W				

### ◆ DIMENSIONS (mm)



ΦD	16	18
ΦD	ΦD + 0.5 Max	
Φd	0.8	0.8
F	7.5	7.5
a	L + 1.5 Max	

### ◆ PART NUMBER SYSTEM( Example : 450V 150 µF )

M	W	2	W	1	5	1	M	N	N	1	8	5	0						
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Special Request

Size code(1850 : 18×50)

Lead length code

Lead forming Type code

Capacitance tolerance code(M: ±20%)

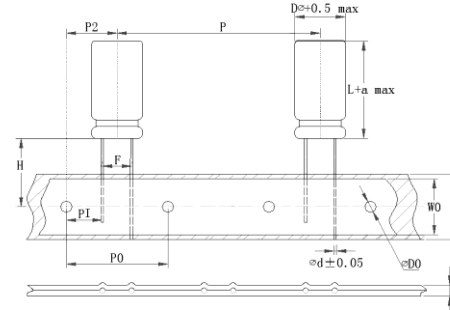
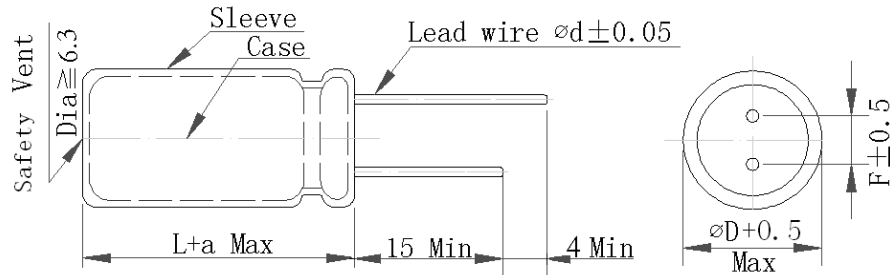
Capacitance code (150µF)

Voltage code(450V)

Series code(MW)

## Aluminum Electrolytic Capacitor

<b>Customer</b>	<b>Digi-Key</b>	<b>SERIES</b>	<b>MW</b>	<b>NO.:</b>	<b>PUBLISH DATE</b>	<b>2022-03-25</b>
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Unit(mm):

P=30.0±1.0

H=18.5±0.5

P0=15.0±0.2

W=18.0±0.5

P1=3.75±0.5

W0=12.5MIN

P2=7.5±1.0

ΦD0=4.0±0.2

F=7.5+0.8/-0.2

t=0.7±0.2

**Original**

**FIG-1**

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															DΦ	L	a	d	F	
1	MW2E220MNN1016R	/	22 μF	±20%	250 V	/	-25~+105	/	/	/	300	/	/	2000	10	16	/	/	5	Original
2	MW2G121MNN1830A6EF3	/	120 μF	±20%	400 V	/	-25~+105	/	/	/	900	/	400	3000	18	30	/	/	7.5	Original
3	MW2G100MNN0816	/	10 μF	±20%	400 V	/	-25~+105	/	/	100	/	/	/	2000	8	16	/	/	3.5	Original
4	MW2G121MNN1635	/	120 μF	±20%	400 V	/	-25~+105	/	/	800	/	/	/	2000	16	35	/	/	7.5	Original
5	MW2G121MNN1825	/	120 μF	±20%	400 V	/	-25~+105	/	/	650	/	/	/	2000	18	25	/	/	7.5	Original
6	MW2G151MNN1835	/	150 μF	±20%	400 V	/	-25~+105	/	/	750	/	/	/	2000	18	35	/	/	7.5	Original
7	MW2G470MNN1225	/	47 μF	±20%	400 V	/	-25~+105	/	/	510	/	/	/	2000	12.5	25	/	/	5	Original
8	MW2G680MNN1623	/	68 μF	±20%	400 V	/	-25~+105	/	/	430	/	/	/	2000	16	23	/	/	7.5	Original
9	MW2G820MNN1625	/	82 μF	±20%	400 V	/	-25~+105	/	/	500	/	/	/	2000	16	25	/	/	7.5	Original
10	MW2G680MNN1625A4E	/	68 μF	±20%	400 V	/	-25~+105	/	/	550	/	/	400	2000	16	25	/	/	7.5	Original
11	MW2S680MNN1625A4ER	/	68 μF	±20%	420 V	/	-25~+105	/	/	700	/	/	400	2000	16	25	/	/	7.5	Original



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12	MW2S101MNN1630A4E	/	100 μF	±20%	420 V	/	-25~+105	/	/	800	/	/	400	2000	16	30	/	/	7.5	Original
13	MW2S100MNN1015	/	10 μF	±20%	420 V	/	-25~+105	/	/	100	/	/	/	2000	10	15	/	/	5	Original
14	MW2S151MNN1835	/	150 μF	±20%	420 V	/	-25~+105	/	/	1250	/	/	/	2000	18	35	/	/	7.5	Original
15	MW2S820MNN1825A4EF3	/	82 μF	±20%	420 V	/	-25~+105	/	/	620	/	/	400	3000	18	25	/	/	7.5	Original
16	MW2S121MNN1830A4ES	/	120 μF	±20%	420 V	/	-25~+105	/	/	85	/	700	400	2000	18	30	/	/	7.5	Original
17	MW2W101MNN1630A4EJ	/	100 μF	±20%	450 V	/	-25~+105	/	/	850	1120	780	300	2000	16.5	30	/	/	7.5	Original
18	MW2W820MNN1825A4EF3	/	82 μF	±20%	450 V	/	-25~+105	/	/	750	/	/	400	3000	18	25	/	/	7.5	Original
19	MW2W101MNN1830A4E	/	100 μF	±20%	450 V	/	-25~+105	/	/	900	1120	/	400	2000	18	30	/	/	7.5	Original
20	MW2W181MNN1840A4EF3	/	180 μF	±20%	450 V	/	-40~+105	/	/	1100	1640	/	400	3000	18	40	/	/	7.5	Original
21	MW2W820MNN1625A4E	/	82 μF	±20%	450 V	/	-25~+105	/	/	700	1100	850	430	2000	16	25	/	/	7.5	Original
22	MW2W151MNN1840	/	150 μF	±20%	450 V	/	-25~+105	/	/	750	/	/	/	2000	18	40	/	/	7.5	Original
23	MW2W470MNN1230	/	47 μF	±20%	450 V	/	-25~+105	/	/	350	/	/	/	2000	12.5	30	/	/	5	Original
24	MW2W221DNN1850A6E	/	220 μF	25%~20%	450 V	/	-25~+105	/	/	1450	/	/	300	2000	18	50	/	/	7.5	Original
25	MW2W121MNN16P1E	/	120 μF	±20%	450 V	/	-25~+105	/	/	1000	/	/	400	2000	16	35.5	/	/	7.5	Original
26	MW2W220MPI1620R	/	22 μF	±20%	450 V	/	-40~+105	/	/	550	/	6850	/	2000	16	20	/	/	7.5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black. Suffix F3 indicates the life of the capacitor is 3000 hrs.	张洪斌	曾爱娥	梁慧妍