



# MW Series

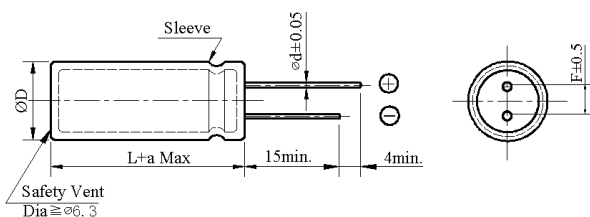
- Low ESR
- Load life 2,000 hours at 105°C



◆ SPECIFICATIONS

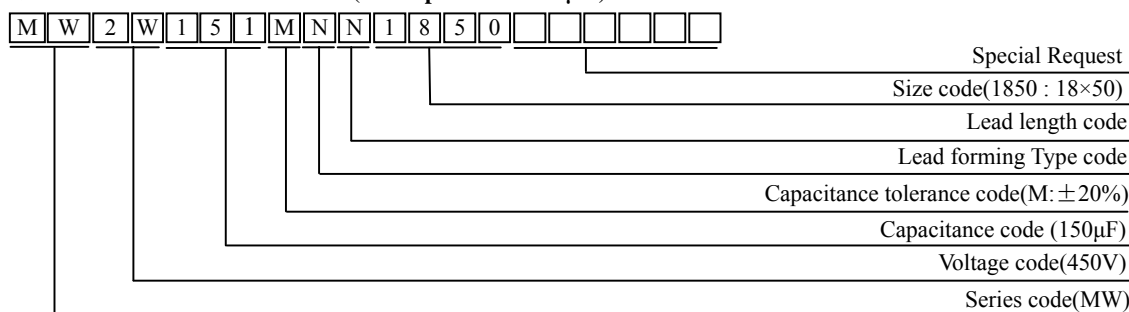
Item	Performance Characteristics						
Category Temperature Range	-25 ~ +105°C						
Working Voltage Range	200 ~ 450Vdc						
Capacitance Range	68 ~ 470 µF						
Capacitance Tolerance	±20% (at 25°C and 120Hz)						
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)    200 ~ 450						
	tanδ(Max)            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)    200~250    400    420 ~450						
	Z(-25°C)/Z(+20°C)    3            5            6 <span style="float: right;">(at 120Hz)</span>						
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. <table border="1" style="width: 100%;"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ specified value
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Dissipation factor(tanδ)	≒ 200% of the specified value						
Leakage current	≒ 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. <table border="1" style="width: 100%;"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ 200% of the specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ 200% of the specified value
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 150µF )





**MW Series**

◆ **Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz**

uF \ Vdc	200		220		250	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
150			16×31.5	610	16×31.5	650
180			16×31.5	680	16×31.5	720
220	16×31.5	750	16×35.5	825	16×35.5	830
	18×31.5	850	18×31.5	860	18×31.5	870
330	16×40	1030	18×40	1092	18×40	1100
	18×35.5	1060				
470	18×45	1335	18×50	1410		

uF \ Vdc	400		420		450	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
68	16×25	455	16×31.5	520	16×35.5	530
			18×31.5	545	18×31.5	557
82	16×31.5	525	16×35.5	545	16×40	560
	18×25	535	18×31.5	560	18×35.5	578
100	16×35.5	590	16×40	620	18×40	683
	18×31.5	610	18×35.5	660		
120	16×40	690	18×40	755	18×45	778
	18×35.5	703				
150	18×40	805	18×45	787	18×50	840
180	18×45	925	18×50	998		

◆ **RIPPLE CURRENT MULTIPLIERS**

**Frequency Multipliers**

Vdc	Cap(uF)	Frequency (Hz)				
		50/60	120	1K	10K	100K
200 ~ 450	68 ~ 220	0.80	1.00	1.40	1.40	1.40
	330 ~ 470	0.90	1.00	1.13	1.13	1.13