

## MP

series 85°C 5000hours

- Small Size
- Long Useful Life
- High Ripple Current
- Industrial Power Supplies and Inverters

### ■ SPECIFICATIONS

Item	Performance Characteristics													
Operating Temperature Range	-40~85°C													
Rated Voltage Range	160~450V													
Capacitance Range	47~3300uF													
Capacitance Tolerance	±20% at 120Hz,20°C													
Leakage Current (MAX)	After 5 minutes at 20°C application of rated voltage,current is not more than 0.01CV or 1.5mA whichever is smaller. I=Leakage Current ( uA ) ,C=Nominal Capacitance ( uF ) ,V=Rated Voltage ( V )													
Dissipation Factor (tan δ)	<table border="1"> <tr> <td>Rated voltage(V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> <td rowspan="2">20°C 120Hz</td> </tr> <tr> <td>Tan δ</td> <td colspan="5">0.15</td> </tr> </table>	Rated voltage(V)	160	200	250	400	450	20°C 120Hz	Tan δ	0.15				
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Low Temperature Stability Impedance Ratio	<p>Measurement frequency:120Hz</p> <table border="1"> <tr> <td>Rated voltage(V)</td> <td>160~450</td> </tr> <tr> <td>Z(-25°C) / Z(+20°C)</td> <td>6</td> </tr> </table>	Rated voltage(V)	160~450	Z(-25°C) / Z(+20°C)	6									
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Load Life	<p>After application of the rated DC voltage with rated ripple current at 85°C 5000hours the capacitors shall meet the requirement bellow</p> <table border="1"> <tr> <td>Leakage Current</td> <td>≤The initial specified value</td> </tr> <tr> <td>Capacitance Change</td> <td>±20% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤200% of the initial specified value</td> </tr> </table>	Leakage Current	≤The initial specified value	Capacitance Change	±20% of the initial value	Dissipation Factor	≤200% of the initial specified value							
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Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 85°C without voltage applied.</p> <table border="1"> <tr> <td>Leakage Current</td> <td>≤200% of the initial specified value</td> </tr> <tr> <td>Capacitance Change</td> <td>±20% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤150% of the initial specified value</td> </tr> </table>	Leakage Current	≤200% of the initial specified value	Capacitance Change	±20% of the initial value	Dissipation Factor	≤150% of the initial specified value							
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### ■ MULTIPLIER FOR RIPPLE CURRENT

#### Frequency coefficient

Frequency(Hz)	60( 50 )	120	1k	10k	≥100k
Coefficient	0.87	1.00	1.20	1.35	1.40

#### Temperature coefficient

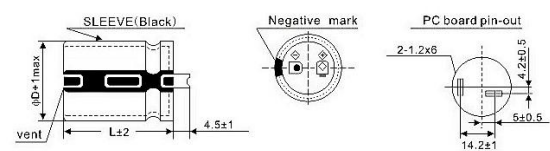
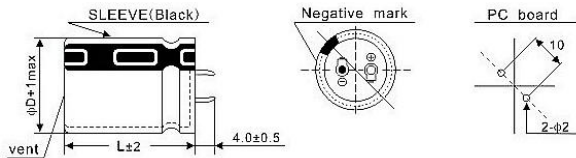
Temperature	40°C	55°C	70°C	85°C
Coefficient	2.7	1.5	1.3	1.0

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## ■DIMENSIONS(mm)

Terminal code:K ( Φ22 ~Φ35 ):Standard

Terminal code:L ( Φ35 ~Φ40 )



## ■STANDARD SIZE PERMISSIBLE RIPPLE CURRENT

Size ΦD×L(mm)Ripple Current(mA 105°C,100kHz)r.m.s

W.V	CAP ( uF )	SIZE	Ripple current
160	330	22×25	1.47
	390	25×25	1.58
	470	22×35	1.78
	560	22×35	2.07
		25×30	2.17
		30×25	2.07
	680	22×40	2.57
		25×35	2.48
	820	22×50	2.77
		25×40	2.68
		30×30	2.87
	1000	35×25	2.77
		25×45	3.30
		30×35	3.37
	1200	35×30	3.30
		25×50	3.67
		30×40	3.78
	1500	35×35	3.57
		30×45	4.38
	1800	35×40	4.27
35×45		4.38	
2200	35×50	5.87	
3300	40×60	5.50	

W.V	CAP ( uF )	SIZE	Ripple current
200	220	22×25	1.07
	330	22×30	1.53
		25×25	1.59
	390	22×35	1.77
		25×30	1.77
	470	22×40	2.00
		30×25	2.09
	560	22×45	2.18
		25×35	2.18
		30×30	2.31
	680	35×25	2.17
		25×40	2.58
		30×30	2.41
	820	25×50	2.67
		30×40	2.77
		35×30	2.58
	1000	30×40	3.38
		35×35	3.61
	1200	30×50	3.78
		35×40	3.67
1500	35×50	4.70	
2200	40×40	5.40	
2700	40×50	5.90	
3300	40×60	6.50	

W.V	CAP ( uF )	SIZE	Ripple current
250	150	22×25	0.90
	180	22×25	0.97
	220	22×30	1.23
		25×25	1.23
	270	22×35	1.23
	330	22×40	1.62
		25×30	1.62
		30×25	1.62
	390	22×45	1.87
		25×35	1.87
	470	22×50	2.17
		25×40	2.17
		30×30	2.17
	560	35×25	2.17
		25×45	2.39
		30×35	2.39
	680	30×40	2.77
		35×30	2.77
	820	30×45	3.18
		35×35	3.18
1000	35×40	3.70	
1200	35×45	4.12	
1500	35×50	4.57	
1800	40×50	5.00	

customer products are available on request

**MP**

series

85°C 5000hours

## ■STANDARD SIZE PERMISSIBLE RIPPLE CURRENT

Size ΦD×L(mm)Ripple Current(mA 105°C,100kHz)r.m.s

W.V	CAP ( uF )	SIZE	Ripple current
400	68	22×25	0.60
	100	22×30	0.80
		25×25	0.83
	120	22×35	0.91
	150	22×40	1.17
		25×30	1.17
		30×25	1.17
	180	22×45	1.30
		25×35	1.30
		30×30	1.30
		35×25	1.30
	220	22×50	1.47
		25×40	1.47
		30×35	1.47
	270	25×45	1.71
		30×40	1.71
		35×30	1.71
	330	30×45	2.07
		35×35	2.07
	390	30×50	2.28
		35×40	2.28
	470	35×45	2.67
	560	35×50	2.98
680	35×60	3.65	
	40×50	3.80	
820	40×50	4.10	
1000	40×60	4.80	
1200	40×60	5.50	

W.V	CAP ( uF )	SIZE	Ripple current
450	47	22×25	0.50
	68	22×30	0.65
		25×25	0.65
	100	22×35	0.87
		25×30	0.87
		30×25	0.87
	120	22×40	1.08
		25×35	1.08
	150	22×50	1.29
		25×40	1.29
		30×30	1.29
	180	25×45	1.37
		30×35	1.37
		35×25	1.37
	220	22×50	1.60
		30×40	1.60
		35×30	1.60
	270	30×45	1.82
		35×35	1.82
	330	35×40	2.17
	390	35×45	2.41
	470	35×50	2.78
		40×40	3.00
560	40×50	3.40	
680	35×60	3.50	
	40×60	3.80	
820	40×60	4.40	

W.V	CAP ( uF )	SIZE	Ripple current

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