



MGA Series

Features

- Endurance with ripple current: 105°C, 2,000 hours
- RoHS Compliance



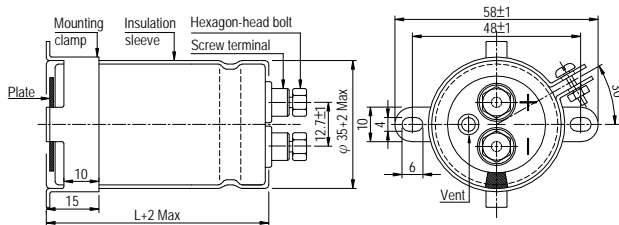
Sleeve & Marking Color: Black & White

Specifications

Items	Performance																			
Category Temperature Range	-40°C ~ +105°C																			
Capacitance Tolerance	±20% (at 120Hz, 20°C)																			
Leakage Current (at 20°C)	$I = 3\sqrt{CV}$ or 5 (mA) whichever is smaller (after 5 minutes) Where, C= rated capacitance in µF V = rated DC working voltage in V																			
Dissipation Factor (Tanδ at 120 Hz, 20°C)	See the Dimensions & Permissible Ripple Current																			
Low Temperature Characteristics (at 120Hz)	Capacitance change : $C(-25°C) / C(+20°C) \geq 0.7$																			
Endurance	<table border="1"> <tr> <td>Test Time</td> <td>2,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> <p>* The above Specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with rated ripple current applied for 2,000 hours at 105°C.</p>	Test Time	2,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value											
Test Time	2,000 Hrs																			
Capacitance Change	Within ±20% of initial value																			
Dissipation Factor	Less than 200% of specified value																			
Leakage Current	Within specified value																			
Shelf Life Test	<table border="1"> <tr> <td>Test Time</td> <td>1,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> <p>* The above Specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).</p>	Test Time	1,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value											
Test Time	1,000 Hrs																			
Capacitance Change	Within ±20% of initial value																			
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Leakage Current	Within specified value																			
Ripple Current & Frequency Multipliers	<table border="1"> <tr> <td>Frequency (Hz)</td> <td>50 / 60</td> <td>100 / 120</td> <td>300</td> <td>1k</td> <td>10k up</td> </tr> <tr> <td>Multiplier</td> <td>0.8</td> <td>1.0</td> <td>1.1</td> <td>1.3</td> <td>1.4</td> </tr> </table>	Frequency (Hz)	50 / 60	100 / 120	300	1k	10k up	Multiplier	0.8	1.0	1.1	1.3	1.4							
Frequency (Hz)	50 / 60	100 / 120	300	1k	10k up															
Multiplier	0.8	1.0	1.1	1.3	1.4															
Ripple Current & Temperature Multipliers	<table border="1"> <tr> <td>Temperature (°C)</td> <td>40</td> <td>55</td> <td>70</td> <td>85</td> <td>105</td> </tr> <tr> <td rowspan="2">Multiplier</td> <td>≤ 250V</td> <td>4.9</td> <td>3.9</td> <td>3.0</td> <td>1.8</td> <td>1.0</td> </tr> <tr> <td>≥ 350V</td> <td>3.8</td> <td>3.3</td> <td>2.5</td> <td>2.0</td> <td>1.0</td> </tr> </table>	Temperature (°C)	40	55	70	85	105	Multiplier	≤ 250V	4.9	3.9	3.0	1.8	1.0	≥ 350V	3.8	3.3	2.5	2.0	1.0
Temperature (°C)	40	55	70	85	105															
Multiplier	≤ 250V	4.9	3.9	3.0	1.8	1.0														
	≥ 350V	3.8	3.3	2.5	2.0	1.0														
Failure percentage	Rated Voltage ≤ 100V DC: ≤ 1% (During useful life)																			
Failure rate	Rated Voltage ≤ 100V DC: ≤ 40 fit (40 10 <sup>-9</sup> /h) Rated Voltage ≥ 160V DC: ≤ 3% (During useful life) Rated voltage ≥ 160V DC: ≤ 70 fit (70 10 <sup>-9</sup> /h)																			

Diagram of Dimensions

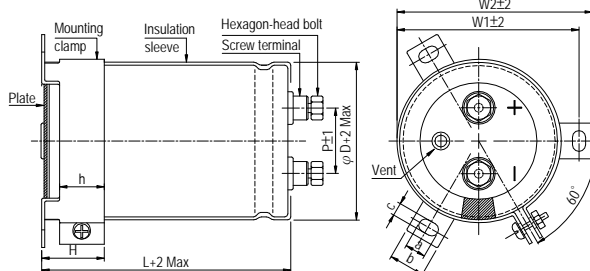
1. 35 φ



Unit: mm

Screw Specifications:  
Plus hexagon-headed screw: M5×0.8×10  
Max. screw tightening torque: 3.23Nm

2. 51 ~ 90 φ



φ D	P	W1	W2	H	h	a	b	c
51	22.0	61.0	65.5	21.0	15.0	7.0	12.0	4.5
64	28.6	72.5	78.0	25.0	20.0	7.0	14.0	4.5
77	32.0	85.5	91.0	35.0	20.0	8.0	16.0	4.5
90	32.0	101	106	34.5	20.0	8.0	16.0	5.0



## Dimension & Permissible Ripple Current

Working Voltage V <sub>DC</sub>	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 105°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C mΩ	LC 5 minutes mA	Part Number
<b>16</b>	18,000	35 × 53	4.2	0.40	29.5	1.61	MGA183M1C--A053
	22,000	35 × 53	4.7	0.40	24.1	1.78	MGA223M1C--A053
	27,000	35 × 53	5.5	0.40	19.7	1.97	MGA273M1C--A053
	33,000	35 × 65	5.7	0.45	18.1	2.18	MGA333M1C--A065
	39,000	35 × 65	6.8	0.45	15.3	2.37	MGA393M1C--A065
	47,000	35 × 83	7.1	0.50	14.1	2.60	MGA473M1C--A083
	56,000	35 × 100	8.4	0.50	11.8	2.84	MGA563M1C--A100
	68,000	35 × 121	8.8	0.55	10.7	3.13	MGA683M1C--A121
	82,000	51 × 83	10.7	0.55	8.9	3.44	MGA823M1C--B083
	100,000	51 × 83	10.8	0.65	8.6	3.79	MGA104M1C--B083
	120,000	51 × 100	13.1	0.65	7.2	4.16	MGA124M1C--B100
	150,000	51 × 121	15.3	0.70	6.2	4.65	MGA154M1C--B121
	180,000	51 × 121	15.7	0.80	5.9	5.00	MGA184M1C--B121
	220,000	64 × 121	19.2	0.85	5.1	5.00	MGA224M1C--C121
	270,000	64 × 121	19.6	1.00	4.9	5.00	MGA274M1C--C121
	330,000	77 × 121	21.1	1.30	5.2	5.00	MGA334M1C--D121
	390,000	77 × 121	21.3	1.50	5.1	5.00	MGA394M1C--D121
470,000	77 × 144	24.2	1.60	4.5	5.00	MGA474M1C--D144	
<b>25</b>	12,000	35 × 53	3.7	0.35	38.7	1.64	MGA123M1E--A053
	15,000	35 × 53	4.1	0.35	31.0	1.84	MGA153M1E--A053
	18,000	35 × 65	4.8	0.35	25.8	2.01	MGA183M1E--A065
	22,000	35 × 65	5.3	0.35	21.1	2.22	MGA223M1E--A065
	27,000	35 × 83	6.4	0.40	19.7	2.46	MGA273M1E--A083
	33,000	35 × 83	6.7	0.40	16.1	2.72	MGA333M1E--A083
	39,000	35 × 100	7.8	0.40	13.6	2.96	MGA393M1E--A100
	47,000	35 × 121	9.3	0.40	11.3	3.25	MGA473M1E--A121
	56,000	51 × 75	9.7	0.50	11.8	3.55	MGA563M1E--B075
	68,000	51 × 100	11.2	0.50	9.8	3.91	MGA683M1E--B100
	82,000	51 × 100	11.2	0.60	9.7	4.30	MGA823M1E--B100
	100,000	51 × 121	14.8	0.60	8.0	4.74	MGA104M1E--B121
	120,000	64 × 100	14.9	0.80	8.8	5.00	MGA124M1E--C100
	150,000	64 × 121	17.9	0.80	7.1	5.00	MGA154M1E--C121
	180,000	64 × 121	17.9	1.00	7.4	5.00	MGA184M1E--C121
	220,000	77 × 121	21.3	1.00	6.0	5.00	MGA224M1E--D121
	270,000	77 × 121	21.7	1.00	4.9	5.00	MGA274M1E--D121
330,000	77 × 144	23.4	1.00	4.0	5.00	MGA334M1E--D144	
390,000	90 × 130	24.9	1.00	3.4	5.00	MGA394M1E--E130	
<b>35</b>	8,200	35 × 53	3.3	0.30	48.5	1.61	MGA822M1V--A053
	10,000	35 × 53	3.6	0.30	39.8	1.77	MGA103M1V--A053
	12,000	35 × 65	4.2	0.30	33.2	1.94	MGA123M1V--A065
	15,000	35 × 65	4.7	0.30	26.5	2.17	MGA153M1V--A065
	18,000	35 × 83	5.7	0.35	25.8	2.38	MGA183M1V--A083
	22,000	35 × 83	6.3	0.35	21.1	2.63	MGA223M1V--A083
	27,000	35 × 100	7.5	0.40	19.7	2.92	MGA273M1V--A100
	33,000	35 × 121	9.0	0.40	16.1	3.22	MGA333M1V--A121
	39,000	51 × 75	9.2	0.45	15.3	3.50	MGA393M1V--B075
	47,000	51 × 100	11.2	0.45	12.7	3.85	MGA473M1V--B100
	56,000	51 × 100	11.4	0.50	11.8	4.20	MGA563M1V--B100
	68,000	51 × 121	13.6	0.50	9.8	4.63	MGA683M1V--B121
	82,000	64 × 100	14.8	0.60	9.7	5.00	MGA823M1V--C100
	100,000	64 × 121	17.6	0.60	8.0	5.00	MGA104M1V--C121
	120,000	64 × 121	17.6	0.70	7.7	5.00	MGA124M1V--C121
	150,000	77 × 121	19.8	0.70	6.2	5.00	MGA154M1V--D121
	180,000	77 × 121	19.8	0.70	5.2	5.00	MGA184M1V--D121
220,000	77 × 144	23.4	0.70	4.2	5.00	MGA224M1V--D144	
270,000	90 × 157	25.5	0.70	3.4	5.00	MGA274M1V--E157	
<b>50</b>	3,900	35 × 53	2.8	0.25	85.1	1.32	MGA392M1H--A053
	4,700	35 × 53	3.1	0.25	70.6	1.45	MGA472M1H--A053
	5,600	35 × 53	3.3	0.25	59.2	1.59	MGA562M1H--A053
	6,800	35 × 53	3.3	0.25	48.8	1.75	MGA682M1H--A053
	8,200	35 × 65	3.8	0.25	40.5	1.92	MGA822M1H--A065
	10,000	35 × 83	4.6	0.25	33.2	2.12	MGA103M1H--A083
	12,000	35 × 83	5.1	0.30	33.2	2.32	MGA123M1H--A083
	15,000	35 × 83	5.7	0.30	26.5	2.60	MGA153M1H--A083



## Dimension & Permissible Ripple Current

Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ×L mm	Ripple Current 120 Hz, 105°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C mΩ	LC 5 minutes mA	Part Number
	18,000	35 × 100	6.7	0.35	25.8	2.85	MGA183M1H--A100
	22,000	35 × 121	8.1	0.35	21.1	3.15	MGA223M1H--A121
	27,000	51 × 75	9.1	0.40	19.7	3.49	MGA273M1H--B075
	33,000	51 × 100	11.1	0.40	16.1	3.85	MGA333M1H--B100
	39,000	51 × 121	13.1	0.40	13.6	4.19	MGA393M1H--B121
	47,000	51 × 121	13.9	0.40	11.3	4.60	MGA473M1H--B121
	56,000	64 × 100	13.9	0.45	10.7	5.00	MGA563M1H--C100
	68,000	64 × 121	16.6	0.45	8.8	5.00	MGA683M1H--C121
	82,000	77 × 121	18.9	0.50	8.1	5.00	MGA823M1H--D121
	100,000	77 × 121	19.5	0.50	6.6	5.00	MGA104M1H--D121
	120,000	77 × 121	19.5	0.50	5.5	5.00	MGA124M1H--D121
	150,000	90 × 130	22.5	0.50	4.4	5.00	MGA154M1H--E130
	180,000	90 × 157	23.9	0.50	3.7	5.00	MGA184M1H--E157
<b>63</b>	2,700	35 × 53	2.3	0.20	98.3	1.24	MGA272M1J--A053
	3,300	35 × 53	2.5	0.20	80.4	1.37	MGA332M1J--A053
	3,900	35 × 53	2.8	0.20	68.0	1.49	MGA392M1J--A053
	4,700	35 × 53	3.1	0.20	56.5	1.63	MGA472M1J--A053
	5,600	35 × 65	3.5	0.20	47.4	1.78	MGA562M1J--A065
	6,800	35 × 65	3.9	0.20	39.0	1.96	MGA682M1J--A065
	8,200	35 × 83	4.4	0.25	40.5	2.16	MGA822M1J--A083
	10,000	35 × 83	4.7	0.25	33.2	2.38	MGA103M1J--A083
	12,000	35 × 100	5.5	0.25	27.6	2.61	MGA123M1J--A100
	15,000	35 × 121	6.6	0.25	22.1	2.92	MGA153M1J--A121
	18,000	51 × 75	7.4	0.30	22.1	3.19	MGA183M1J--B075
	22,000	51 × 100	9.0	0.30	18.1	3.53	MGA223M1J--B100
	27,000	51 × 121	10.9	0.30	14.7	3.91	MGA273M1J--B121
	33,000	51 × 121	12.0	0.30	12.1	4.33	MGA333M1J--B121
	39,000	64 × 100	12.5	0.35	11.9	4.70	MGA393M1J--C100
	47,000	64 × 121	14.9	0.35	9.9	5.00	MGA473M1J--C121
	56,000	64 × 121	16.3	0.40	9.5	5.00	MGA563M1J--C121
	68,000	77 × 121	18.4	0.40	7.8	5.00	MGA683M1J--D121
	82,000	77 × 144	20.0	0.40	6.5	5.00	MGA823M1J--D144
	100,000	77 × 144	20.0	0.40	5.3	5.00	MGA104M1J--D144
	120,000	90 × 157	21.8	0.40	4.4	5.00	MGA124M1J--E157
<b>80</b>	2,200	35 × 53	2.4	0.15	90.5	1.26	MGA222M1K--A053
	2,700	35 × 53	2.7	0.15	73.7	1.39	MGA272M1K--A053
	3,300	35 × 53	3.0	0.15	60.3	1.54	MGA332M1K--A053
	3,900	35 × 65	3.4	0.15	51.0	1.68	MGA392M1K--A065
	4,700	35 × 65	3.7	0.15	42.3	1.84	MGA472M1K--A065
	5,600	35 × 83	4.5	0.20	47.4	2.01	MGA562M1K--A083
	6,800	35 × 83	4.9	0.20	39.0	2.21	MGA682M1K--A083
	8,200	35 × 100	5.1	0.20	32.4	2.43	MGA822M1K--A100
	10,000	35 × 121	6.1	0.20	26.5	2.68	MGA103M1K--A121
	12,000	51 × 75	6.7	0.25	27.6	2.94	MGA123M1K--B075
	15,000	51 × 100	8.3	0.25	22.1	3.29	MGA153M1K--B100
	18,000	51 × 121	9.9	0.25	18.4	3.60	MGA183M1K--B121
	22,000	51 × 121	11.0	0.25	15.1	3.98	MGA223M1K--B121
	27,000	64 × 100	11.4	0.30	14.7	4.41	MGA273M1K--C100
	33,000	77 × 100	13.9	0.30	12.1	4.87	MGA333M1K--D100
	39,000	77 × 100	13.9	0.30	10.2	5.00	MGA393M1K--D100
	47,000	77 × 121	16.5	0.30	8.5	5.00	MGA473M1K--D121
	56,000	77 × 121	18.1	0.30	7.1	5.00	MGA563M1K--D121
	68,000	77 × 144	19.7	0.30	5.9	5.00	MGA683M1K--D144
	82,000	90 × 130	22.1	0.30	4.9	5.00	MGA823M1K--E130
<b>100</b>	1,800	35 × 53	2.7	0.15	111	1.27	MGA182M2A--A053
	2,200	35 × 53	3.0	0.15	90.5	1.41	MGA222M2A--A053
	2,700	35 × 65	3.5	0.15	73.7	1.56	MGA272M2A--A065
	3,300	35 × 83	4.2	0.15	60.3	1.72	MGA332M2A--A083
	3,900	35 × 83	4.2	0.15	51.0	1.87	MGA392M2A--A083
	4,700	35 × 100	5.0	0.15	42.3	2.06	MGA472M2A--A100
	5,600	35 × 100	5.4	0.15	35.5	2.24	MGA562M2A--A100
	6,800	35 × 121	5.8	0.15	29.3	2.47	MGA682M2A--A121
	8,200	51 × 75	6.4	0.15	24.3	2.72	MGA822M2A--B075
	10,000	51 × 100	7.8	0.15	19.9	3.00	MGA103M2A--B100



## Dimension & Permissible Ripple Current

Working Voltage V <sub>DC</sub>	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 105°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C mΩ	LC 5 minutes mA	Part Number
<b>100</b>	12,000	51 × 121	9.3	0.20	22.1	3.29	MGA123M2A--B121
	15,000	51 × 121	10.4	0.20	17.7	3.67	MGA153M2A--B121
	18,000	64 × 100	10.4	0.20	14.7	4.02	MGA183M2A--C100
	22,000	64 × 121	12.5	0.20	12.1	4.45	MGA223M2A--C121
	27,000	77 × 121	13.7	0.25	12.3	4.93	MGA273M2A--D121
	33,000	77 × 121	15.2	0.25	10.1	5.00	MGA333M2A--D121
	39,000	77 × 144	16.1	0.25	8.5	5.00	MGA393M2A--D144
	47,000	90 × 130	19.3	0.25	7.1	5.00	MGA473M2A--E130
	56,000	90 × 157	21.1	0.25	5.9	5.00	MGA563M2A--E157
<b>160</b>	560	35 × 53	1.2	0.15	355	0.90	MGA561M2C--A053
	680	35 × 53	1.3	0.15	293	0.99	MGA681M2C--A053
	820	35 × 65	1.4	0.15	243	1.09	MGA821M2C--A065
	1,000	35 × 83	1.8	0.15	199	1.20	MGA102M2C--A083
	1,200	35 × 83	1.9	0.15	166	1.31	MGA122M2C--A083
	1,500	35 × 83	2.1	0.15	133	1.47	MGA152M2C--A083
	1,800	35 × 83	2.5	0.15	111	1.61	MGA182M2C--A083
	2,200	35 × 100	2.8	0.15	90.5	1.78	MGA222M2C--A100
	2,700	35 × 100	3.3	0.15	73.7	1.97	MGA272M2C--A100
	3,300	51 × 75	3.8	0.15	60.3	2.18	MGA332M2C--B075
	3,900	51 × 75	3.8	0.15	51.0	2.37	MGA392M2C--B075
	4,700	51 × 96	4.6	0.15	42.3	2.60	MGA472M2C--B096
	5,600	51 × 96	5.1	0.15	35.5	2.84	MGA562M2C--B096
	6,800	64 × 96	6.1	0.15	29.3	3.13	MGA682M2C--C096
	8,200	64 × 96	7.0	0.15	24.3	3.44	MGA822M2C--C096
	10,000	77 × 96	8.4	0.15	19.9	3.79	MGA103M2C--D096
	12,000	77 × 115	9.4	0.15	16.6	4.16	MGA123M2C--D115
	15,000	77 × 130	11.4	0.15	13.3	4.65	MGA153M2C--D130
	18,000	77 × 144	13.4	0.15	11.1	5.00	MGA183M2C--D144
	22,000	90 × 130	14.5	0.15	9.0	5.00	MGA223M2C--E130
27,000	90 × 157	16.0	0.15	7.4	5.00	MGA273M2C--E157	
<b>200</b>	330	35 × 53	0.90	0.15	603	0.77	MGA331M2D--A053
	390	35 × 53	1.0	0.15	510	0.84	MGA391M2D--A053
	470	35 × 53	1.1	0.15	423	0.92	MGA471M2D--A053
	560	35 × 53	1.2	0.15	355	1.00	MGA561M2D--A053
	680	35 × 53	1.3	0.15	293	1.11	MGA681M2D--A053
	820	35 × 65	1.5	0.15	243	1.21	MGA821M2D--A065
	1,000	35 × 83	1.7	0.15	199	1.34	MGA102M2D--A083
	1,200	35 × 83	1.9	0.15	166	1.47	MGA122M2D--A083
	1,500	35 × 100	2.3	0.15	133	1.64	MGA152M2D--A100
	1,800	35 × 100	2.5	0.15	111	1.80	MGA182M2D--A100
	2,200	51 × 75	3.0	0.15	90.5	1.99	MGA222M2D--B075
	2,700	51 × 96	3.6	0.15	73.7	2.20	MGA272M2D--B096
	3,300	51 × 96	4.1	0.15	60.3	2.44	MGA332M2D--B096
	3,900	51 × 115	4.9	0.15	51.0	2.65	MGA392M2D--B115
	4,700	64 × 96	5.3	0.15	42.3	2.91	MGA472M2D--C096
	5,600	64 × 96	5.8	0.15	35.5	3.17	MGA562M2D--C096
	6,800	64 × 115	6.9	0.15	29.3	3.50	MGA682M2D--C115
	8,200	64 × 130	7.6	0.15	24.3	3.84	MGA822M2D--C130
	10,000	77 × 115	9.6	0.15	19.9	4.24	MGA103M2D--D115
	12,000	77 × 130	10.2	0.15	16.6	4.65	MGA123M2D--D130
15,000	90 × 130	12.2	0.15	13.3	5.00	MGA153M2D--E130	
18,000	90 × 157	13.1	0.15	11.1	5.00	MGA183M2D--E157	
<b>250</b>	270	35 × 53	0.8	0.15	737	0.78	MGA271M2E--A053
	330	35 × 53	0.9	0.15	603	0.86	MGA331M2E--A053
	390	35 × 53	1.0	0.15	510	0.94	MGA391M2E--A053
	470	35 × 53	1.1	0.15	423	1.03	MGA471M2E--A053
	560	35 × 65	1.4	0.15	355	1.12	MGA561M2E--A065
	680	35 × 83	1.5	0.15	293	1.24	MGA681M2E--A083
	820	35 × 83	1.6	0.15	243	1.36	MGA821M2E--A083
	1,000	35 × 100	1.8	0.15	199	1.50	MGA102M2E--A100
	1,200	35 × 100	1.9	0.15	166	1.64	MGA122M2E--A100
	1,500	51 × 75	2.3	0.15	133	1.84	MGA152M2E--B075
	1,800	51 × 75	2.5	0.15	111	2.01	MGA182M2E--B075
	2,200	51 × 96	3.0	0.15	90.5	2.22	MGA222M2E--B096



Dimension & Permissible Ripple Current

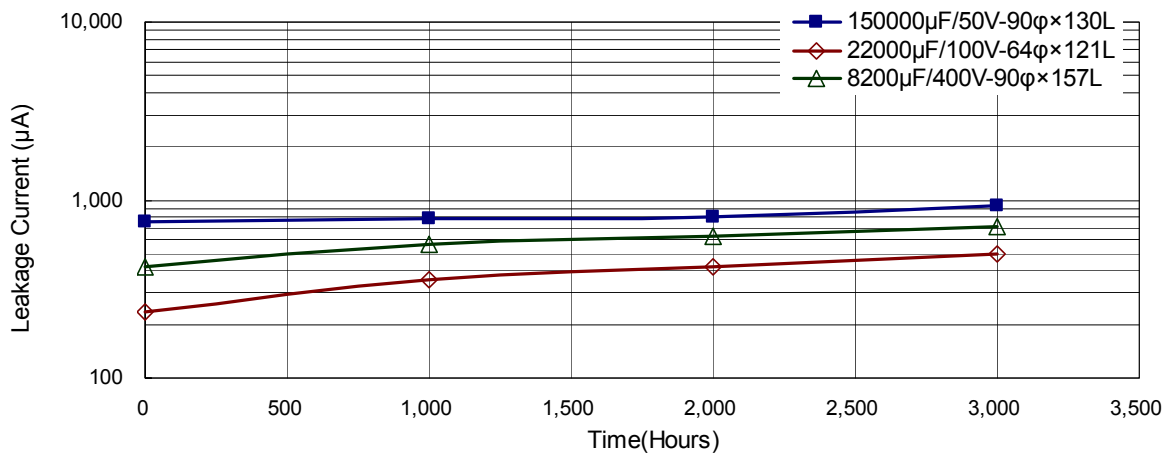
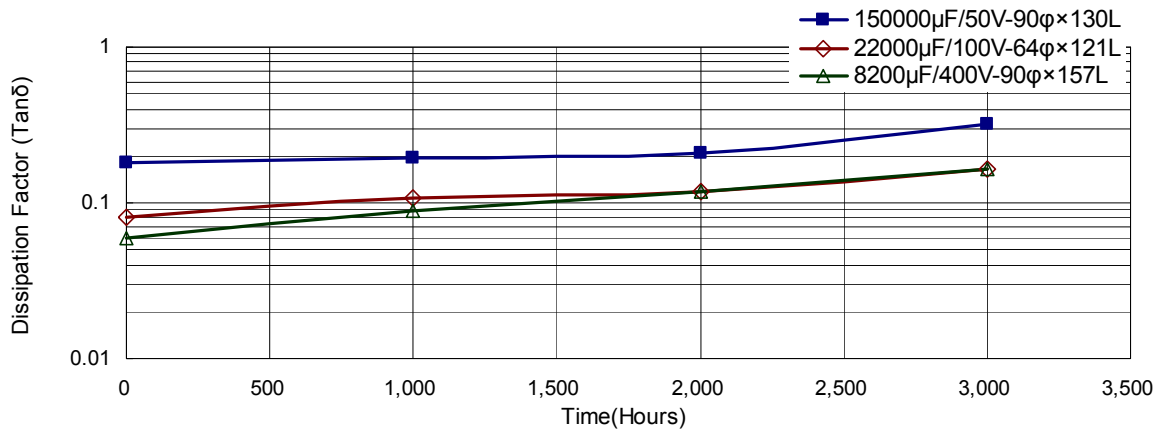
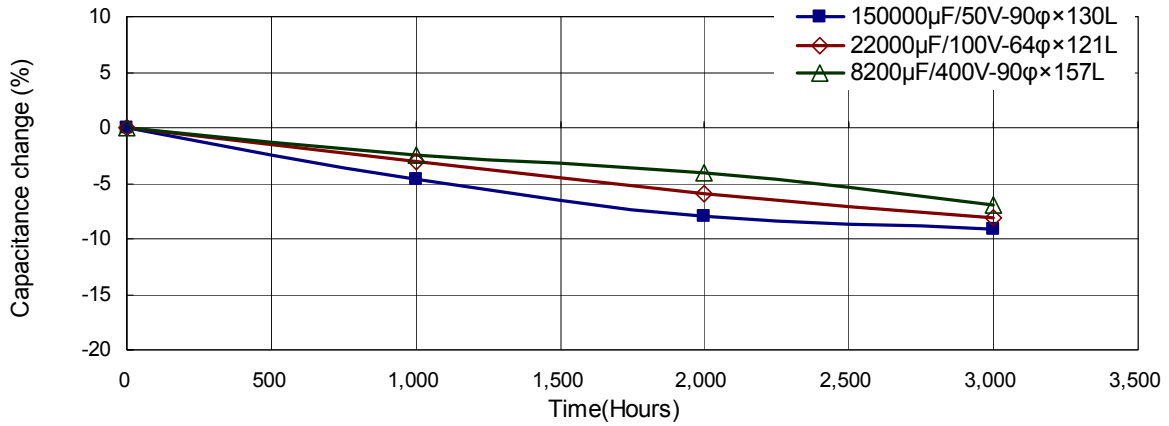
Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 105°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C mΩ	LC 5 minutes mA	Part Number
<b>250</b>	2,700	51 × 115	3.5	0.15	73.7	2.46	MGA272M2E--B115
	3,300	64 × 96	4.2	0.15	60.3	2.72	MGA332M2E--C096
	3,900	64 × 96	4.6	0.15	51.0	2.96	MGA392M2E--C096
	4,700	64 × 115	5.7	0.15	42.3	3.25	MGA472M2E--C115
	5,600	64 × 130	6.3	0.15	35.5	3.55	MGA562M2E--C130
	6,800	77 × 115	7.7	0.15	29.3	3.91	MGA682M2E--D115
	8,200	77 × 130	8.4	0.15	24.3	4.30	MGA822M2E--D130
	10,000	77 × 155	10.0	0.15	19.9	4.74	MGA103M2E--D155
	12,000	90 × 140	11.9	0.15	16.6	5.00	MGA123M2E--E140
	15,000	90 × 157	12.5	0.15	13.3	5.00	MGA153M2E--E157
<b>350</b>	180	35 × 53	0.8	0.15	1106	0.75	MGA181M2V--A053
	220	35 × 53	0.9	0.15	905	0.83	MGA221M2V--A053
	270	35 × 53	1.0	0.15	737	0.92	MGA271M2V--A053
	330	35 × 65	1.2	0.15	603	1.02	MGA331M2V--A065
	390	35 × 65	1.3	0.15	510	1.11	MGA391M2V--A065
	470	35 × 83	1.5	0.15	423	1.22	MGA471M2V--A083
	560	35 × 83	1.6	0.15	355	1.33	MGA561M2V--A083
	680	35 × 100	1.7	0.15	293	1.46	MGA681M2V--A100
	820	35 × 100	1.8	0.15	243	1.61	MGA821M2V--A100
	1,000	51 × 75	2.2	0.15	199	1.77	MGA102M2V--B075
	1,200	51 × 75	2.3	0.15	166	1.94	MGA122M2V--B075
	1,500	51 × 96	3.0	0.15	133	2.17	MGA152M2V--B096
	1,800	51 × 115	3.6	0.15	111	2.38	MGA182M2V--B115
	2,200	51 × 130	4.0	0.15	90.5	2.63	MGA222M2V--B130
	2,700	64 × 96	4.6	0.15	73.7	2.92	MGA272M2V--C096
	3,300	64 × 115	5.6	0.15	60.3	3.22	MGA332M2V--C115
	3,900	64 × 130	6.7	0.15	51.0	3.50	MGA392M2V--C130
	4,700	77 × 121	7.5	0.15	42.3	3.85	MGA472M2V--D121
5,600	77 × 130	8.3	0.15	35.5	4.20	MGA562M2V--D130	
6,800	77 × 155	9.4	0.15	29.3	4.63	MGA682M2V--D155	
8,200	90 × 157	11.4	0.15	24.3	5.00	MGA822M2V--E157	
<b>400</b>	180	35 × 53	0.8	0.15	1106	0.80	MGA181M2G--A053
	220	35 × 53	0.9	0.15	905	0.89	MGA221M2G--A053
	270	35 × 65	1.1	0.15	737	0.99	MGA271M2G--A065
	330	35 × 65	1.2	0.15	603	1.09	MGA331M2G--A065
	390	35 × 83	1.3	0.15	510	1.18	MGA391M2G--A083
	470	35 × 83	1.4	0.15	423	1.30	MGA471M2G--A083
	560	35 × 100	1.6	0.15	355	1.42	MGA561M2G--A100
	680	35 × 100	1.7	0.15	293	1.56	MGA681M2G--A100
	820	35 × 121	2.0	0.15	243	1.72	MGA821M2G--A121
	1,000	51 × 75	2.2	0.15	199	1.90	MGA102M2G--B075
	1,200	51 × 96	2.7	0.15	166	2.08	MGA122M2G--B096
	1,500	51 × 115	3.3	0.15	133	2.32	MGA152M2G--B115
	1,800	51 × 130	3.7	0.15	111	2.55	MGA182M2G--B130
	2,200	64 × 96	4.2	0.15	90.5	2.81	MGA222M2G--C096
	2,700	64 × 115	4.8	0.15	73.7	3.12	MGA272M2G--C115
	3,300	64 × 130	5.5	0.15	60.3	3.45	MGA332M2G--C130
	3,900	77 × 115	6.5	0.15	51.0	3.75	MGA392M2G--D115
	4,700	77 × 130	7.6	0.15	42.3	4.11	MGA472M2G--D130
5,600	77 × 155	9.4	0.15	35.5	4.49	MGA562M2G--D155	
6,800	90 × 157	10.4	0.15	29.3	4.95	MGA682M2G--E157	
8,200	90 × 157	11.8	0.15	24.3	5.00	MGA822M2G--E157	

Part Numbering System

MGA series	1000μF	±20%	350V	Plain case + Mounting clamp	M5 Post	51 φ × 75L	Pb-free Terminal + PVC Sleeve
<b>MGA</b>	<b>102</b>	<b>M</b>	<b>2V</b>	<b>-</b>	<b>-</b>	<b>B075</b>	
Series name	Capacitance	Capacitance tolerance	Rated voltage	Case Type	Terminal type	Case size	Terminal and Sleeve Type
	Example:		Example:			Example:	
	Cap. Symbol	M = ±20% K = ±10%	WV Symbol			φ D×L Code	
	3,300 332		400 2G			64×130 D130	
	10,000 103		450 2W			90×157 E157	

Note: For more details, please refer to "Part Numbering System (Screw Type)" on page 14.

## Typical Endurance Curves



## Useful Life Chart

