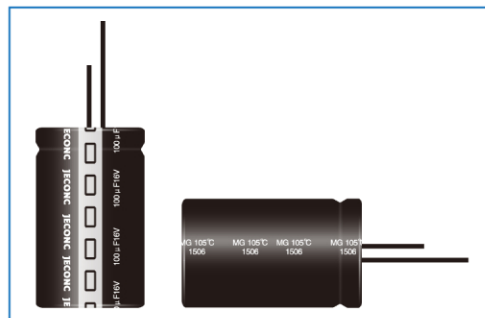


# MG系列 SERIES

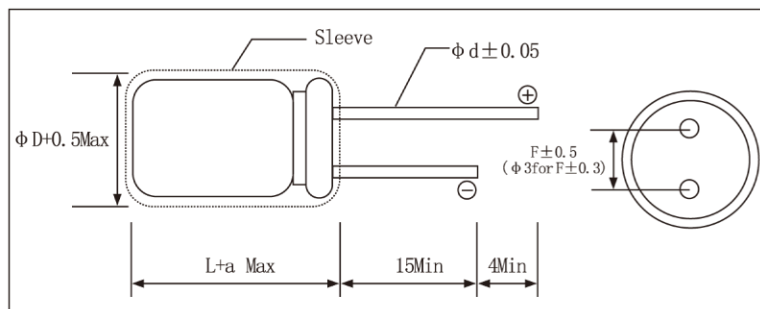
- 1000hrs at 105°C
- Wide temperature range
- 5mm height



## ◆ SPECIFICATION

Items	Characteristics																										
Operating Temperature Range(°C)	-55~+105°C																										
Voltage range (V)	4~50V																										
Capacitance Range (μF)	0.1~220 μF																										
Capacitance Tolerance	±20% (at 20°C, 120Hz)																										
leakage current (μA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.																										
Dissipation Factor(Tan δ)	<table border="1"> <thead> <tr> <th>WV (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Tan δ (max)</td> <td>0.37</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13 (0.14)</td> <td>0.12 (0.14)</td> </tr> </tbody> </table> (at 20°C, 120Hz) The number in "()" apply for φ3	WV (V)	4	6.3	10	16	25	35	50	Tan δ (max)	0.37	0.28	0.24	0.20	0.16	0.13 (0.14)	0.12 (0.14)										
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Low Temperature Characteristics	<table border="1"> <thead> <tr> <th colspan="2">Rated Voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>Z-25°C/Z+20°C</td> <td>6</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> (at 120Hz)	Rated Voltage (V)		4	6.3	10	16	25	35	50	Impedance Ratio	Z-25°C/Z+20°C	6	3	3	2	2	2	2	Z-40°C/Z+20°C	12	8	5	4	3	3	3
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Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated rippled current is applied for 1000 hours at 105°C . <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within± 25%initial value (φ3and≤16V)、Within ±20%initial value (≥25V)</td> </tr> <tr> <td>D.F. (Tan δ)</td> <td>Not more than 200% of specified value</td> </tr> <tr> <td>leakage current</td> <td>Not more than specified value</td> </tr> </tbody> </table>	Capacitance change	Within± 25%initial value (φ3and≤16V)、Within ±20%initial value (≥25V)	D.F. (Tan δ)	Not more than 200% of specified value	leakage current	Not more than specified value																				
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Shelf Life	The following 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 .Before the measurement , the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within± 25%initial value (φ3and≤16V)、Within ±20%initial value (≥25V)</td> </tr> <tr> <td>D.F. (Tan δ)</td> <td>Not more than 200% of specified value</td> </tr> <tr> <td>leakage current</td> <td>Not more than specified value</td> </tr> </tbody> </table>	Capacitance change	Within± 25%initial value (φ3and≤16V)、Within ±20%initial value (≥25V)	D.F. (Tan δ)	Not more than 200% of specified value	leakage current	Not more than specified value																				
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## ◆ DIMENSIONS(mm)



φD	3	4	5	6.3	8.0
F	1.0	1.5	2.0	2.5	3.5
φd	0.4	0.45	0.45	0.45	0.5
a	1.0	1.0	1.0	1.0	1.0

## ◆ Frequency Coefficient

Frequency	50Hz	120Hz	300Hz	1KHz	10KHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

**MG** 系列  
SERIES

◆ STANDARD RATINGS

Ur (Surge Voltage) Code	Rated Capacitance	Rated Ripple Current 105°C 120Hz	Size ΦD×L
(V)	(μF)	(mA rms)	(mm)
4 (5) 0G	22	22	4×5
	33	30	5×5
	47	36	5×5
	100	60	6.3×5
6.3 (8) 0J	22	22	4×5
	33	30	5×5
	47	36	5×5
	100	60	6.3×5
10 (13) 1A	22	27	5×5
	33	35	5×5
	47	46	6.3×5
	100	65	8×5
	220	83	8×5
16 (20) 1C	10	18	4×5
	22	30	5×5
	33	40	6.3×5
	47	50	6.3×5
	68	55	8×5
	100	68	8×5
25 (32) 1E	4.7	13	4×5
	10	23	5×5
	22	38	6.3×5
	33	48	6.3×5
	47	55	8×5
35 (44) 1V	2.2	7.5	3×5
	3.3	11	4×5
	4.7	15	4×5
	10	25	5×5
	22	42	6.3×5
	33	50	8×5
50 (63) 1H	0.1	1.0	4×5
	0.22	2.6	4×5
	0.33	3.2	4×5
	0.47	3.8	4×5
	1	6.2	4×5
	2.2	11.0	4×5
	3.3	14	4×5
	4.7	19	5×5
	10	30	6.3×5
	15	35	8×5
	22	50	8×5