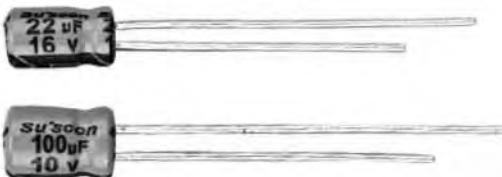


MA series

- Height 7mm low leakage current.
- RoHS Compliance.
- 7mm高，低漏電流品。



SPECIFICATIONS

Items 項目	Characteristics 特性																											
Capacitance Tolerance 靜電容量誤差	$\pm 20\%$ (120Hz, 20°C)																											
Operating Temperature Range 適用溫度範圍	-40 ~ +85°C																											
Rated Voltage Range 工作電壓範圍	6.3 ~ 50V																											
Leakage Current 洩漏電流	$I \leq 0.002CV$ or 0.4 (μA), which is greater. (After 2 minutes application of working voltage)																											
Dissipation Factor 散逸因素 ($\tan \delta$)	Measurement Frequency: 120Hz, Temperature: 20°C. <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>$\tan \delta$ (Max)</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>							Rated Voltage (V)	6.3	10	16	25	35	50	$\tan \delta$ (Max)	0.24	0.20	0.16	0.14	0.12	0.10							
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Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz. <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>$Z(-25^\circ C) / Z(20^\circ C)$</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>$Z(-40^\circ C) / Z(20^\circ C)$</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>							Rated Voltage (V)	6.3	10	16	25	35	50	$Z(-25^\circ C) / Z(20^\circ C)$	4	3	2	2	2	2	$Z(-40^\circ C) / Z(20^\circ C)$	8	6	4	4	3	3
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Load Life 負荷壽命	1,000hours, with application of working voltage at 85°C <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="6">Within $\pm 20\%$ of Initial Value</td> </tr> <tr> <td>$\tan \delta$</td> <td colspan="6">200% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="6">Initial Specified Value or less</td> </tr> </table>							Capacitance Change	Within $\pm 20\%$ of Initial Value						$\tan \delta$	200% or less of Initial Specified Value						Leakage Current	Initial Specified Value or less					
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Shelf Life 放置壽命	1,000hours, no voltage applied, at 85°C. After Test: Ur to be applied for 30 minutes, 24 to 48hours before measurement. <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="6">Within $\pm 20\%$ of Initial Value</td> </tr> <tr> <td>$\tan \delta$</td> <td colspan="6">200% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="6">Initial Specified Value or less</td> </tr> </table>							Capacitance Change	Within $\pm 20\%$ of Initial Value						$\tan \delta$	200% or less of Initial Specified Value						Leakage Current	Initial Specified Value or less					
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Leakage Current	Initial Specified Value or less																											
Standards 參照標準	JIS C 5101-4-1 and JIS C 5101-2																											

PERMISSIBLE RIPPLE CURRENT

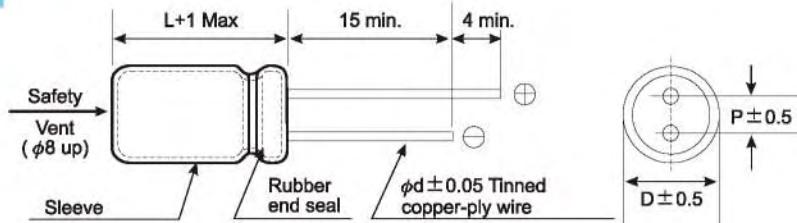
Frequency Coefficient of Allowable Ripple Current

Frequency (Hz)	50	120	300	1K	$\geq 10K$
Coefficient	0.70	1.00	1.17	1.36	1.50

MA

MA series

DIMENSIONS (mm)



ϕD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ϕd	0.45	0.5	0.5	0.5

STANDARD RATINGS

DxL (mm); R.C.: (mA rms) at 85°C, 120Hz.

Cap (μF)	WV(V) (Code)	6.3 (0J)		10 (1A)		16 (1C)	
		Item	D x L	R.C.	D x L	R.C.	D x L
10						4x7	28
22		4x7	35	5x7	38	5x7	44
33		5x7	43	5x7	48	6.3x7	57
47		5x7	50	6.3x7	59	6.3x7	68
100		6.3x7	78	8x7	96	8x7	106
220		8x7	130				

Cap (μF)	WV(V) (Code)	25 (1E)		35 (1V)		50 (1H)	
		Item	D x L	R.C.	D x L	R.C.	D x L
0.1						4x7	1.1
0.22						4x7	2.3
0.33						4x7	3.5
0.47						4x7	5.1
1						4x7	10
2.2						4x7	19
3.3						4x7	24
4.7				4x7	24	5x7	29
10		5x7	33	5x7	36	6.3x7	45
22		6.3x7	51	6.3x7	57	8x7	65
33		6.3x7	63	8x7	72		
47		8x7	78				