

### MS1, MT1 Series

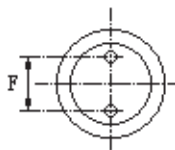
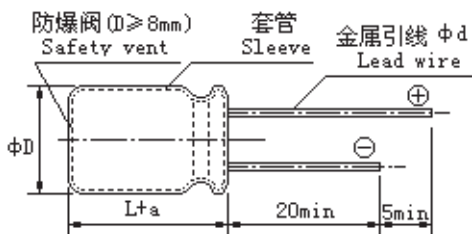
- 袖珍型 ● 高 CV 值 ● 高度为 5mm ● MS1 型为 85°C 产品；MT1 型为 105°C 产品。
- Miniature size ● High CV ● 5mm height ● MS1 series for 85°C；MT1 series for 105°C.



#### ■ 主要技术性能 Specifications

使用温度范围 Operating Temperature Range	-40 ~ +85°C (MS1 series)	-40 ~ +105°C (MT1 series)																					
额定电压范围 Rated Voltage Range	6.3 ~ 50V DC																						
标称电容量允许偏差 Capacitance Tolerance	± 20% (120Hz, 20°C)																						
漏电流 Leakage Current	I ≤ 0.01CV (μA) 或 3 μA 取较大者, I ≤ 0.01CV or 3 μA Whichever is greater																						
损耗正切值 (120Hz 20°C) Dissipation Factor	<table border="1"> <tr> <td>W.V.</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tg δ</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>		W.V.	6.3	10	16	25	35	50	tg δ	0.24	0.20	0.16	0.14	0.12	0.10							
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耐久性 Load Life	<p>(MS1)+85°C / (MT1)+105°C 施加带纹波电流的额定电压 1000 小时, 恢复 16 小时后, 电容器应满足下列要求 After applying rated voltage with specified ripple current for 1000 hours at (MS1) +85°C or (MT1) +105°C and then resumed 16 hours. The capacitor shall meet the following limits.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>≤ ± 20% 初始测量值 ≤ ± 20% of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤ 规定值 ≤ The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 ≤ 200% of the specified value</td> </tr> </table>		电容量变化率 Capacitance Change	≤ ± 20% 初始测量值 ≤ ± 20% of Initial measured value	漏电流值 Leakage	≤ 规定值 ≤ The specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 ≤ 200% of the specified value															
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高温贮存 Shelf Life	<p>(MS1)+85°C / (MT1) +105°C, 500 小时, 恢复 16 小时后 After storage for 500 hours at (MS1) +85°C or (MT1) +105°C and then resumed 16 hours</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>≤ ± 20% 初始测量值 ≤ ± 20% of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤ 2 倍规定值 ≤ 200% of the specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 ≤ 200% of the specified value</td> </tr> </table>		电容量变化率 Capacitance Change	≤ ± 20% 初始测量值 ≤ ± 20% of Initial measured value	漏电流值 Leakage	≤ 2 倍规定值 ≤ 200% of the specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 ≤ 200% of the specified value															
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#### ■ 外形图及尺寸 Case size table



	mm			
φD ± 0.5	4	5	6.3	8
L	5	5	5	5
F ± 0.5	1.5	2.0	2.5	3.5(2.5)
φd ± 0.05	0.45			
a	1.0			

## MS1, MT1 Series

### ■ 标称电容量、额定电压、额定纹波电流及外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV mA μF	6.3V 0J		10V 1A		16 1C		25V 1E		35V 1V		50V 1H	
	ΦD×L	I ~ mA	ΦD×L	I ~ mA	ΦD×L	I ~ mA	ΦD×L	I ~ mA	ΦD×L	I ~ mA	ΦD×L	I ~ mA
0.1 (0R1)											4×5	1.0
0.22 (R22)											4×5	2.0
0.33 (R33)											4×5	3.0
0.47 (R47)											4×5	4.0
1.0 (010)											4×5	8.0
2.2 (2R2)											4×5	13
3.3 (3R3)											4×5	14
4.7 (4R7)					4×5	10	4×5	13	4×5	17	5×5	18
10 (100)	4×5	18	4×5	20	4×5	20	4×5 5×5	20 22	5×5	24	5×5	28
22 (220)	4×5	23	4×5	23	4×5 5×5	25 31	5×5	30	5×5 6.3×5	35 48	6.3×5 8×5	50 60
33 (330)	4×5	25	4×5 5×5	25 35	5×5	36	5×5 6.3×5	38 48	6.3×5 8×5	50 65	8×5	80
47 (470)	4×5 5×5	27 39	5×5 6.3×5	40 52	5×5 6.3×5	40 56	6.3×5	65	8×5	85		
100 (101)	5×5 6.3×5	42 66	6.3×5	85	6.3×5	86	8×5	120				
220 (221)	6.3×5	89	8×5	120	8×5	130						
330 (331)	8×5	130										

I ~ 额定纹波电流 Rated ripple current: (mA , 85/105°C, 120Hz)

### ■ 额定纹波电流的频率系数 Frequency coefficient of rated ripple current

Frequency 频率		50Hz	120Hz	300Hz	1KHz	10KHz≤
Coefficient 系数	0.1 ~ 47 μF	0.80	1.00	1.17	1.30	1.50
	100 ~ 470 μF	0.80	1.00	1.10	1.15	1.20