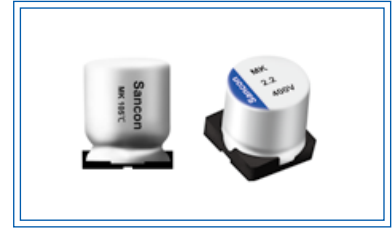


MK

- 保证寿命：+105°C，2000~3000小时 Load life: +105°C，2000~3000 hours.
- 适合高密度贴片安装 Designed for surface mounting on high density PC board.
- 符合 RoHS RoHS Compliant.



Surface Mount

主要技术性能 Specifications

项目 Item	特性 Performance Characteristics																																															
工作温度范围 Category Temperature Range	-40~+105°C (6.3~450V _{dc})																																															
额定电压范围 Rated Voltage Range	6.3~450V _{dc}																																															
标称电容量允许偏差 Capacitance Tolerance	±20% (+20°C, 120Hz)																																															
漏电流 Leakage Current (+20°C, max)	6.3~100 V _{dc}	160~450 V _{dc}																																														
	I ≤ 0.01CV(μA) or 3μA 2分钟 (2minutes) 取较大者 (Whichever is greater)																																															
	I: 漏电流 Leakage current(μA), C: 静电容量 Nominal capacitance(μF), V: 额定电压 Rated voltage(V)																																															
损失角正切值 (tgδ) Dissipation Factor (Max) (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage(V_{dc})</th> <th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th><th>160~250</th><th>400~450</th> </tr> </thead> <tbody> <tr> <td>5×7.7, 6.3×7.7</td> <td>0.30</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.12</td><td>0.12</td><td>0.12</td><td>-</td><td>0.20</td> </tr> <tr> <td>6.3×10.5, Dia 8mm, Dia 10mm, Dia12.5mm, Dia 16mm, Dia 18mm</td> <td>0.40</td><td>0.30</td><td>0.26</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.12</td><td>0.12</td><td>0.12</td><td>0.15</td><td>0.20</td> </tr> </tbody> </table>												Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100	160~250	400~450	5×7.7, 6.3×7.7	0.30	0.24	0.20	0.16	0.14	0.12	0.12	0.12	0.12	-	0.20	6.3×10.5, Dia 8mm, Dia 10mm, Dia12.5mm, Dia 16mm, Dia 18mm	0.40	0.30	0.26	0.16	0.14	0.12	0.12	0.12	0.12	0.15	0.20
	Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100	160~250	400~450																																				
5×7.7, 6.3×7.7	0.30	0.24	0.20	0.16	0.14	0.12	0.12	0.12	0.12	-	0.20																																					
6.3×10.5, Dia 8mm, Dia 10mm, Dia12.5mm, Dia 16mm, Dia 18mm	0.40	0.30	0.26	0.16	0.14	0.12	0.12	0.12	0.12	0.15	0.20																																					
温度特性 (阻抗比 Max.) Temperature characteristics (Max. Impedance ratio) (120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage(V_{dc})</th> <th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th><th>160~250</th><th>400~450</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>6</td><td>6</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>10</td><td>18</td> </tr> </tbody> </table>												Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100	160~250	400~450	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	2	6	6	Z(-40°C)/Z(+20°C)	10	8	6	4	3	3	3	3	3	10	18
Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100	160~250	400~450																																					
Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	2	6	6																																					
Z(-40°C)/Z(+20°C)	10	8	6	4	3	3	3	3	3	10	18																																					
耐久性 Endurance	<p>在 105°C环境中, 连续加载额定电压规定时间后, 待温度恢复到 20°C进行测量时, 应满足以下要求 The specifications listed below shall be met when the capacitors are restored to 20°C after rated voltage is applied for a specified period of time at 105°C</p> <p>寿命 Load life 2000小时 (160~450 V_{dc}: 3000小时) 2000 hours (160~450 V_{dc}: 3000 hours)</p> <p>电容量变化率 Capacitance change: ≤初始值的 ±20% ±20% of the initial value</p> <p>损失角正切值 D.F. (tanδ): ≤初始规格值的 200% 200% of the initial specified value</p> <p>漏电流 Leakage current: ≤初始规格值 The initial specified value</p>																																															
高温贮存 Shelf Life	<p>在 105°C环境中, 无负荷放置 1000 小时后 (6.3~100V_{dc}: 500 小时), 待温度恢复到 20°C进行测量时, 应满足以下要求 The following specifications shall be satisfied when the capacitors are restored to 20°C after leaving them under no load at 105°C for 1000 hours (6.3~100V_{dc}: 500 hours)</p> <p>电容量变化率 Capacitance change: ≤初始值的 ±20% ±20% of the initial value</p> <p>损失角正切值 D.F. (tanδ): ≤初始规格值的 200% 200% of the initial specified value</p> <p>漏电流 Leakage current: ≤初始规格值的 200% 200% of the initial specified value</p>																																															

外形图及尺寸 Diagram of Dimensions

Unit: mm

D	L	A	B	C	W	P
5	7.7	5.3	5.3	5.9	0.5~0.8	1.4
6.3	7.7	6.6	6.6	7.2	0.5~0.8	1.9
6.3	10.5	6.6	6.6	7.2	0.5~0.8	1.9
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
8	12.5	8.3	8.3	9.0	0.7~1.1	3.1
8	13.5	8.3	8.3	9.0	0.7~1.1	3.1
8	15.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5
10	12.5	10.3	10.3	11.0	0.7~1.1	4.5
10	13.5	10.3	10.3	11.0	0.7~1.1	4.5
10	16.5	10.3	10.3	11.0	0.7~1.1	4.5
12.5	13.5	13.0	13.0	13.7	1.0~1.3	4.5
12.5	16.0	13.0	13.0	13.7	1.0~1.3	4.5
12.5	21.0	13.0	13.0	13.7	1.0~1.3	4.5
16	16.5	17.0	17.0	18.0	1.0~1.3	6.5
16	21.5	17.0	17.0	18.0	1.0~1.3	6.5
18	16.5	19.0	19.0	20.0	1.0~1.3	6.5
18	21.5	19.0	19.0	20.0	1.0~1.3	6.5

纹波电流修正系数 Multiplier for Ripple Current

频率系数 Frequency coefficient

频率 (Hz) Frequency	120	1K	10K	100K
额定电压 (V _{dc}) Rated voltage				
6.3~450	0.50	0.80	0.90	1.00

标准品一览表 Standard Ratings

Rated Voltage (V _{dc})	Cap (μF)	Size ΦD×L (mm)	tanδ	Rated ripple current (mArms) 105°C /100KHz
6.3 (0J)	100	5×7.7	0.30	105
	220	6.3×7.7	0.30	160
	330	8×10.5	0.40	340
	1000	10×10.5	0.40	860
10 (1A)	33	5×7.7	0.24	105
	100	6.3×7.7	0.24	175
	220	6.3×7.7	0.24	180
	330	8×10.5	0.30	340
	470	8×10.5	0.30	360
	820	10×10.5	0.30	860
16 (1C)	47	5×7.7	0.20	105
	100	6.3×7.7	0.20	175
	150	6.3×7.7	0.20	190
	220	8×10.5	0.26	500
	470	8×10.5	0.26	545
25 (1E)	33	5×7.7	0.16	105
	47	6.3×7.7	0.16	180
	100	6.3×7.7	0.16	205
	220	8×10.5	0.16	550
	330	10×10.5	0.16	780
	470	10×12.5	0.16	875
35 (1V)	10	5×7.7	0.14	105
	22	5×7.7	0.14	110
	47	6.3×7.7	0.14	210
	100	8×10.5	0.14	575
	220	10×10.5	0.14	835
	330	10×12.5	0.14	900
50 (1H)	10	5×7.7	0.12	90
	22	6.3×7.7	0.12	175
	33	6.3×7.7	0.12	180
	47	8×10.5	0.12	540
	100	10×10.5	0.12	700
	220	12.5×13.5	0.12	900
63 (1J)	330	12.5×16	0.12	1180
	10	5×7.7	0.12	85
	22	6.3×7.7	0.12	150
	33	8×10.5	0.12	375
	47	8×10.5	0.12	450
	100	10×10.5	0.12	575
80 (1B)	220	12.5×13.5	0.12	890
	10	6.3×7.7	0.12	140
	22	8×10.5	0.12	375
	33	8×10.5	0.12	450
	47	10×10.5	0.12	575
	100	10×12.5	0.12	600
100 (1K)	150	12.5×13.5	0.12	800
	220	12.5×16	0.12	960
	4.7	5×7.7	0.12	70
	10	6.3×7.7	0.12	135
	22	8×10.5	0.12	345
	33	10×10.5	0.12	560
	47	10×10.5	0.12	575
	100	12.5×13.5	0.12	680

Rated Voltage (V _{dc})	Cap (μF)	Size ΦD×L (mm)	tanδ	Rated ripple current (mArms) 105°C /100KHz
160 (2C)	10	10×10.5	0.15	90
	15	10×10.5	0.15	136
	22	10×13.5	0.15	180
		12.5×13.5	0.15	200
	33	10×16.5	0.15	240
		12.5×13.5	0.15	310
	47	12.5×16	0.15	420
		16×16.5	0.15	520
	68	16×21.5	0.15	660
		18×16.5	0.15	660
100	16×21.5	0.15	780	
	18×21.5	0.15	780	
200 (2D)	10	10×10.5	0.15	120
	15	10×10.5	0.15	164
	22	10×13.5	0.15	200
		12.5×16	0.15	236
	33	10×16.5	0.15	260
		12.5×16	0.15	300
	47	12.5×21	0.15	440
		16×21.5	0.15	556
	68	16×21.5	0.15	680
		18×21.5	0.15	680
250 (2E)	2.2	6.3×10.5	0.15	56
	3.3	6.3×10.5	0.15	68
	4.7	8×10.5	0.15	96
		10×10.5	0.15	104
	10	12.5×13.5	0.15	184
	22	16×16.5	0.15	364
		16×21.5	0.15	470
	33	18×16.5	0.15	470
		18×21.5	0.15	580
	400 (2G)	1	6.3×7.7	0.20
1.5		6.3×10.5	0.20	36
2.2		6.3×10.5	0.20	44
		8×10.5	0.20	52
3.3		8×10.5	0.20	64
		10×10.5	0.20	72
3.9		8×13.5	0.20	72
		10×10.5	0.20	76
4.7		8×10.5	0.20	78
		8×12.5	0.20	80
5.6		10×10.5	0.20	84
		8×12.5	0.20	96
6.8		8×13.5	0.20	108
8.2		8×15.5	0.20	130
10		10×16.5	0.20	156
		16×16.5	0.20	176
15		12.5×16	0.20	184
		16×16.5	0.20	210
22	16×21.5	0.20	260	
33	18×21.5	0.20	280	
450 (2W)	2.2	10×10.5	0.20	50
	3.3	12.5×13.5	0.20	80
	4.7	12.5×13.5	0.20	96
	10	16×16.5	0.20	170
	15	16×21.5	0.20	200
	22	16×21.5	0.20	240