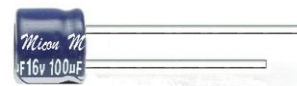


ST series

Features

- ◆ 5.0±1 mm max height
- ◆ Load life 105℃, 1000 hrs assured
- ◆ For detail specifications, please refer to Engineering Bulletin No.E112
- ◆ RoHS Compliant



Specifications

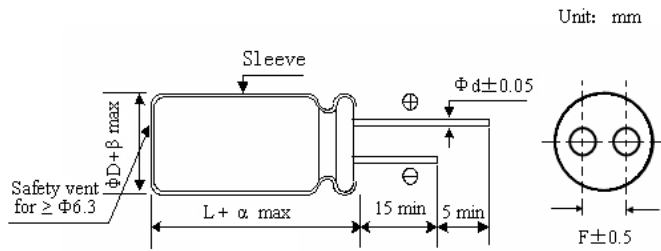
Item	Performance Characteristics																																								
Operating Temperature Range	-40~+105℃																																								
Rate Voltage Range	4~50 VDC																																								
Capacitance Range	0.1~100uf																																								
Capacitance Tolerance	±20%（120Hz，+20℃）																																								
Leakage current（+20℃,max.）	After 2 minutes, whichever is greater measured with rated working voltage applied.																																								
Dissipation factor（tgδ）	<table><tr><td>Working Voltage(VDC)</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>D.F(%)max</td><td>35</td><td>24</td><td>20</td><td>16</td><td>14</td><td>12</td><td>10</td></tr></table> (120Hz，+20℃)								Working Voltage(VDC)	4	6.3	10	16	25	35	50	D.F(%)max	35	24	20	16	14	12	10																	
Working Voltage(VDC)	4	6.3	10	16	25	35	50																																		
D.F(%)max	35	24	20	16	14	12	10																																		
Low Temperature Characteristics（120Hz）	<table><tr><td colspan="9">Impedance ratio max.</td></tr><tr><td>Working Voltage(VDC)</td><td>4</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℃/ Z+20℃</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℃/ Z+20℃</td><td>12</td><td>8</td><td>5</td><td>4</td><td>3</td><td>3</td><td>3</td></tr></table>								Impedance ratio max.									Working Voltage(VDC)	4	6.3	10	16	25	35	50	Z-25℃/ Z+20℃	6	3	3	2	2	2	2	Z-40℃/ Z+20℃	12	8	5	4	3	3	3
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Z-40℃/ Z+20℃	12	8	5	4	3	3	3																																		
Load Life	Test conditions Duration time : 1000Hrs Ambient temperature : +105℃ Applied voltage : Rated DC working voltage After test requirement at +20℃ Capacitance change : ≤±20% of the initial measured value(4v : ≤±30%) Dissipation factor : ≤200% of the initial specified value Leakage current : ≤The initial specified value																																								
Shelf Life	Test conditions Duration time : 1000Hrs Ambient temperature : +105℃ Applied voltage : None After test requirement at +20℃ : Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes																																								

Multiplier for Ripple Current vs. Frequency

CAP(UF)\Frequency (Hz)	50(60)	120	1K	≥10K
0.1~47	0.8	1	1.30	1.50
100~220	0.8	1	1.15	1.20

ST series

Diagram of Dimensions



ΦD	3	4	5	6.3	8
F	1.0±0.3	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
Φd	0.4	0.45			

Case Size

		Φ D ×L													
Voltage		4V		6.3V		10V		16V		25V		35V		50V	
Cap(μF)		Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.1														3×5	1.0
														4×5	1.5
0.15														3×5	1.8
														4×5	2.0
0.22														3×5	2.3
														4×5	2.6
0.33														3×5	3.0
														4×5	3.2
0.47														3×5	3.5
														4×5	3.8
0.68														3×5	4.6
														4×5	5
1														3×5	5.6
														4×5	6.2
1.5														3×5	6.5
														4×5	7
2.2												3×5	7.5	3×5	8
												4×5	7.5	4×5	11
3.3										3×5	8.5	3×5	9	4×5	14
										4×5	8.5	4×5	11		
4.7								3×5	9	3×5	10	4×5	15	5×5	19
								4×5	9	4×5	13				
6.8						3×5	11	4×5	13	4×5	15	5×5	19	5×5	22
						4×5	11							6.3×5	25
10		3×5	10	3×5	12	4×5	15	4×5	18	5×5	23	5×5	25	6.3×5	30
		4×5	10	4×5	12										
15		4×5	13	4×5	15	4×5	18	5×5	23	6.3×5	32	6.3×5	32	8×5	35
22		4×5	22	4×5	22	5×5	27	5×5	30	6.3×5	39	6.3×5	48	8×5	50
33		5×5	30	5×5	30	5×5	35	6.3×5	45	6.3×5	48	8×5	50		
47		5×5	36	5×5	36	6.3×5	48	6.3×5	50	6.3×5	50				
										8×5	55				
68		6.3×5	52	6.3×5	52	6.3×5	53	8×5	55						
100		6.3×5	60	6.3×5	60	8×5	65	8×5	68						
220		6.3×5	80	6.3×5	80	8×5	83								

Ripple Current (mA,rms) at 105 °C 120KHz