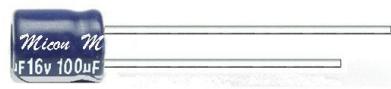


## SRD series

### Features

- ◆ 105°C Low leakage current , height 7 mm
- ◆ For detail specifications, please refer to Engineering Bulletin No.E122
- ◆ RoHS Compliant



### Specifications

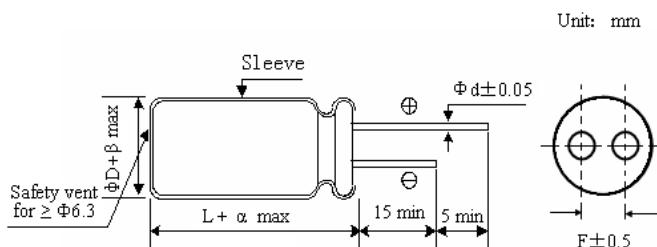
Item	Performance Characteristics																																													
Operating Temperature Range	-40~+105°C																																													
Rate Voltage Range	4~63 VDC																																													
Capacitance Range	0.1~100μF																																													
Capacitance Tolerance	±20% ( 120Hz, +20°C )																																													
Leakage current (+20°C,max.)	I≤0.002 CV or 0.4 (μA) After 2 minute, whichever is greater measured with rated working voltage applied.																																													
Dissipation factor (tgδ)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Working Voltage(VDC)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">6.3</td> <td style="text-align: center;">10</td> <td style="text-align: center;">16</td> <td style="text-align: center;">25</td> <td style="text-align: center;">35</td> <td style="text-align: center;">50</td> <td style="text-align: center;">63</td> </tr> <tr> <td style="text-align: center;">D.F(%)max</td> <td style="text-align: center;">25</td> <td style="text-align: center;">22</td> <td style="text-align: center;">20</td> <td style="text-align: center;">16</td> <td style="text-align: center;">14</td> <td style="text-align: center;">12</td> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> </tr> </table> <p style="text-align: center;">( 120Hz, +20°C )</p>									Working Voltage(VDC)	4	6.3	10	16	25	35	50	63	D.F(%)max	25	22	20	16	14	12	10	10																			
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Low Temperature Characteristics (120Hz)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="10">Impedance ratio max.</td> </tr> <tr> <td style="text-align: center;">Working Voltage(VDC)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">6.3</td> <td style="text-align: center;">10</td> <td style="text-align: center;">16</td> <td style="text-align: center;">25</td> <td style="text-align: center;">35</td> <td style="text-align: center;">50</td> <td style="text-align: center;">63</td> </tr> <tr> <td style="text-align: center;">Z-25°C / Z+20°C</td> <td style="text-align: center;">6</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">Z-40°C / Z+20°C</td> <td style="text-align: center;">12</td> <td style="text-align: center;">10</td> <td style="text-align: center;">6</td> <td style="text-align: center;">6</td> <td style="text-align: center;">4</td> <td style="text-align: center;">4</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> </tr> </table>									Impedance ratio max.										Working Voltage(VDC)	4	6.3	10	16	25	35	50	63	Z-25°C / Z+20°C	6	4	3	3	2	2	2	2	Z-40°C / Z+20°C	12	10	6	6	4	4	4	3
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Load Life	<p>Test conditions</p> <p>Duration time : 1000Hrs</p> <p>Ambient temperature : +105°C</p> <p>Applied voltage : Rated DC working voltage</p> <p>After test requirement at +20°C</p> <p>Capacitance change : ≤±20% of the initial measured value(4v : ≤±30%)</p> <p>Dissipation factor : ≤200% of the initial specified value</p> <p>Leakage current : ≤The initial specified value</p>																																													
Shelf Life	<p>Test conditions</p> <p>Duration time : 1000Hrs</p> <p>Ambient temperature : +105°C</p> <p>Applied voltage : None</p> <p>After test requirement at +20°C : Same limits as Load life.</p> <p>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes</p>																																													

### Multiplier for Ripple Current vs. Frequency

CAP(μA )\Frequency (Hz)	60(50)	120	400	1K	≥10K
0.1~10	0.65	1.0	1.20	1.30	1.50
10~100	0.8	1.0	1.10	1.15	1.20

## SRD series

### Diagram of Dimensions



ΦD	4	5	6.3	8
F	1.5 ± 0.5	2.0 ± 0.5	2.5 ± 0.5	3.5 ± 0.5
Φd	0.45		0.5	

### Case Size

 $\Phi D \times L$ 

Voltage	4V		6.3V		10V		16V		25V	
Cap(μF)	Case Size	Ripple Current								
0.1										
0.22										
0.33										
0.47										
1.0										
2.2										
3.3										
4.7									4x7	19
10							4x7	27	5x7	29
22					4x7	36	4x7	40	6.3x7	44
33	4x7	33	4x7	41	5x7	44	5x7	50	6.3x7	55
47	4x7	39	5x7	49	6.3x7	54	6.3x7	62	8x7	74
100	6.3x7	59	6.3x7	75	8x7	90				

Voltage	35		50		63	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.1			4x7	3	4x7	3
0.22			4x7	5	4x7	5
0.33			4x7	6	4x7	6
0.47			4x7	7	4x7	7
1.0			4x7	10	4x7	10
2.2			4x7	16	5x7	19
3.3	4x7	18	4x7	20	6.3x7	29
4.7	5x7	21	6.3x7	24	6.3x7	36
10	5x7	32	8x7	40		
22	6.3x7	49				
33	8x7	67				
47						
100						

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