

SY Series 7mm Low Impedance Long Life



Features

- ◆ Operating temperature -55~105°C.
- ◆ 105°C 2000Hours assured.
- ◆ RoHS Compliant

Specifications

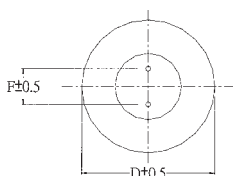
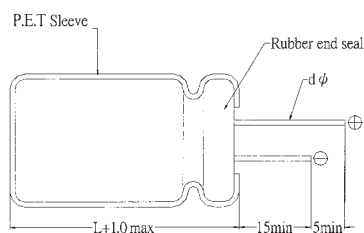
Item	Performance Characteristics																					
Operating Temperature Range	-55 to +105°C																					
Rated Voltage Range	6.3 to 50 VDC																					
Capacitance Range	1~330 μ F																					
Capacitance Tolerance	±20%(120Hz,+20°C)																					
Leakage Current (+20°C,max.)	I ≤ 0.01CV or 3(μ A) After 2 minutes with rated working voltage applied.																					
Dissipation Factor (tan δ , at 20°C , 120Hz)	<table border="1"> <tr> <td>Working Voltage(VDC)</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>18</td> <td>16</td> <td>14</td> <td>12</td> <td>12</td> <td>10</td> </tr> </table>	Working Voltage(VDC)	6.3	10	16	25	35	50	D.F.(%)max.	18	16	14	12	12	10							
	Working Voltage(VDC)	6.3	10	16	25	35	50															
D.F.(%)max.	18	16	14	12	12	10																
Low Temperature Characteristics (at 120Hz)	Impedance ratio max																					
	<table border="1"> <tr> <td>Rated Voltage(VDC)</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°C / Z+20°C</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-55°C / Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated Voltage(VDC)	6.3	10	16	25	35	50	Z-25°C / Z+20°C	2	2	2	2	2	2	Z-55°C / Z+20°C	3	3	3	3	3	3
	Rated Voltage(VDC)	6.3	10	16	25	35	50															
Z-25°C / Z+20°C	2	2	2	2	2	2																
Z-55°C / Z+20°C	3	3	3	3	3	3																
Endurance	Test condition Duration time :2000Hrs Ambient temperature :+105°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : with ±20% of the initial measured value Dissipation factor : ≤200% of the initial specified value Leakage current : ≤The initial specified value																					
Shelf Life	Test condition Duration time :1000Hrs Ambient temperature :+105°C Applied voltage :None After test requirement at +20°C:Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					

Radial

Multiplier for Ripple Current vs. Frequency

CAP(μ F)\Frequency(Hz)	50(60)	120	400	1K	10K	50K-100K
1 ≤ CAP ≤ 10	0.47	0.59	0.76	0.85	0.97	1
10 < CAP ≤ 220	0.52	0.65	0.80	0.89	0.97	1
100 < CAP	0.58	0.72	0.84	0.90	0.98	1

Diagram of Dimensions:(unit:mm)



D φ	4	5	6.3	8
F	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
d φ	0.45		0.5	

Case Size

WV (Vdc)	Cap (uF)	Size (mm)	Ripple current (mArms/105°C /100KHz)	Max Imp.(Ω) at 20°C/100KHz
6.3	33	5x7	90	1.95
6.3	47	6.3x7	99	1.87
6.3	68	6.3x7	125	1.00
6.3	100	6.3x7	144	0.82
6.3	120	6.3x7	148	0.77
6.3	150	6.3x7	160	0.66
6.3	180	8x7	171	0.64
6.3	220	8x7	180	0.55
6.3	330	8x7	315	0.39
10	22	4x7	63	3.63
10	33	5x7	95	1.90
10	47	5x7	120	1.30
10	68	6.3x7	144	0.88
10	100	6.3x7	180	0.55
10	120	6.3x7	185	0.52
10	150	8x7	207	0.50
10	180	8x7	225	0.49
10	220	8x7	252	0.40
16	10	4x7	60	3.50
16	15	4x7	75	3.00
16	22	5x7	90	2.00
16	33	6.3x7	120	1.40
16	47	6.3x7	140	0.90
16	68	8x7	160	0.65

WV (Vdc)	Cap (uF)	Size (mm)	Ripple current (mArms/105°C /100KHz)	Max Imp.(Ω) at 20°C/100KHz
16	100	8x7	180	0.49
16	120	8x7	315	0.93
16	150	8x7	333	0.95
16	180	8x7	360	0.33
16	220	8x7	387	0.29
25	10	4x7	60	3.50
25	22	5x7	99	1.87
25	33	6.3x7	144	0.88
25	47	8x7	160	0.70
25	68	8x7	180	0.55
25	100	8x7	225	0.39
25	150	8x7	306	0.35
35	6.8	4x7	63	3.63
35	10	5x7	99	3.20
35	22	6.3x7	140	0.90
35	33	8x7	180	0.55
35	47	8x7	220	0.50
50	1	4x7	60	3.50
50	2.2	4x7	60	3.50
50	3.3	4x7	60	3.50
50	4.7	4x7	60	3.50
50	6.8	5x7	80	2.20
50	10	6.3x7	135	0.92