

SZ series 7mm LOW IMPEDANCE

- Low impedance at 100kHz operating temperature range -55~105°C
- Load life:105°C 1000hours
- High Quality

■SPECIFICATIONS

Item	Performance Characteristics																								
Operating Temperature Range	-55~105°C																								
Rated Voltage Range	6.3~50V																								
Capacitance Range	1~470uF																								
Capacitance Tolerance	±20% at 120Hz,20°C																								
Leakage Current (MAX)	≤0.01CV or 3uA whichever is greater. (after 2 minutes)																								
Dissipation Factor (tan δ)	When nominal capacitance is over 1000uF,tan δ shall be added 0.02 to the listed value with increase of every 1000uF. <table border="1"> <thead> <tr> <th>Rated voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th></th> </tr> </thead> <tbody> <tr> <td>Tan δ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>MAX (20°C 120Hz)</td> </tr> </tbody> </table>	Rated voltage(V)	6.3	10	16	25	35	50		Tan δ	0.22	0.19	0.16	0.16	0.14	0.12	MAX (20°C 120Hz)								
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Low Temperature Stability Impedance Ratio	Measurement frequency:120Hz <table border="1"> <thead> <tr> <th colspan="2">Rated voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Impedance ratio</td> <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>ZT/Z20 (MAX)</td> <td>Z(-40°C) / Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated voltage(V)		6.3	10	16	25	35	50	Impedance ratio	Z(-25°C) / Z(+20°C)	2	2	2	2	2	2	ZT/Z20 (MAX)	Z(-40°C) / Z(+20°C)	3	3	3	3	3	3
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Load Life	After life test at conditions stated in the table below 1000hrs 105°C,the capacitors shall meet the following requirement. <table border="1"> <tbody> <tr> <td>Leakage Current</td> <td>Not more than the specified value</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value</td> </tr> </tbody> </table>	Leakage Current	Not more than the specified value	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Not more than 200% of the specified value																		
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Shelf Life	After leaving capacitors under no load at 105°C for 1000hours and applying voltage according to JIS C-5102 4-3,they meet the specified value for load life characteristics listed above.																								
Standard	According to JIS C-5141																								

■MULTIPLIER FOR RIPPLE CURRENT

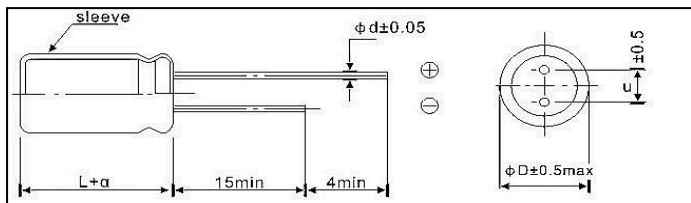
Frequency coefficient

Frequency(Hz)	60(50)	120	400	1k	10k	50~100k
6.8~10	0.47	0.59	0.76	0.85	0.97	1.00
10≤cap≤100	0.52	0.65	0.80	0.89	0.97	1.00
100≤cap≤1000	0.58	0.72	0.84	0.90	0.98	1.00

Temperature	60°C	70°C	85°C	105°C
Coefficient	1.8	1.5	1.3	1.0

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■DIMENSIONS(mm)



ΦD	4	5	6.3	8
Φd	0.45	0.5		
F	1.5	2.0	2.5	3.5
α	1.0			

■STANDARD SIZE PERMISSIBLE RIPPLE CURRENT

Size ΦD×L(mm)Ripple Current(mA 105°C,120Hz)r.m.s

W.V	6.3			10			16			
	Cap(uF)	SIZE	Ripple	Impedance	SIZE	Ripple	Impedance	SIZE	Ripple	Impedance
10							4×7	60	2.1	
22				4×7	70	3.2	4×7 5×7	85 100	2.0 1.8	
33		5×7	100	1.72	5×7	105	1.7	6.3×7	140	1.3
47		5×7	100	1.72	5×7	120	1.5	4×7 5×7 6.3×7	100 125 150	1.8 1.6 1.2
68		6.3×7	150	0.85	6.3×7	160	0.82	8×7	180	0.55
100		5×7 6.3×7	145 150	0.88 0.85	5×7 6.3×7	160 190	0.82 0.54	6.3×7 8×7	200 210	0.50 0.45
120		6.3×7	160	0.72	6.3×7	200	0.49	8×7	340	0.37
150		6.3×7	170	0.62	8×7	220	0.45	8×7	360	0.33
180		8×7	180	0.58	8×7	240	0.43	8×7	390	0.31
220		6.3×7 8×7	175 200	0.60 0.52	6.3×7 8×7	240 280	0.43 0.38	8×7	420	0.28
330		8×7	320	0.38	8×7	290	0.35			
470					8×7	300	0.25			

Size ΦD×L(mm)Ripple Current(mA 105°C,120Hz)r.m.s

W.V	25			35			50			
	Cap(uF)	SIZE	Ripple	Impedance	SIZE	Ripple	Impedance	SIZE	Ripple	Impedance
1								4×7	51	7.5
4.7								5×7	140	1.4
6.8					4×7	75	3.2			
10		4×7	65	3.1	5×7	120	1.65	5×7	150	1.3
22		5×7	105	1.8	6.3×7	165	0.78			
33		6.3×7	160	0.8	8×7	205	0.49			
47		5×7 8×7	130 205	1.10 0.55	6.3×7 8×7	215 248	0.52 0.48			
68		8×7	205	0.50						
100		6.3×7 8×7	240 252	0.36 0.34						
150		8×7	330	0.38						

※以上最大体积为标准尺寸，其他为体积缩小品，寿命相应缩短