

S5 series 105°C 5mmL

- Miniature type capacitors, with 5mm height
- Load life: 105°C 1000hours
- Solvent proof

■ SPECIFICATIONS

Item	Performance Characteristics																											
Operating Temperature Range	-40~105°C																											
Rated Voltage Range	4~50V																											
Capacitance Range	0.1~220uF																											
Capacitance Tolerance	±20% at 120Hz, 20°C																											
Leakage Current (MAX)	After 2 minutes application of rated voltage, leakage current is not more than 0.01CV or 3(uA), whichever is greater																											
Dissipation Factor (tan δ)	For capacitance of more than 1000uF, added 0.02 for every increase of 1000 uF, Measurement frequency: 120Hz, Temperature: 20°C <table border="1" data-bbox="432 1115 1182 1196"> <thead> <tr> <th>Rated voltage(V)</th> <th>4</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>Tan δ</td> <td>0.35</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>	Rated voltage(V)	4	6.3	10	16	25	35	50	Tan δ	0.35	0.26	0.22	0.18	0.16	0.14	0.12											
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Low Temperature Stability Impedance Ratio	Measurement frequency: 120Hz <table border="1" data-bbox="432 1249 1398 1357"> <thead> <tr> <th colspan="2">Rated voltage(V)</th> <th>4</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>6</td> <td>4</td> <td>3</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>12</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated voltage(V)		4	6.3	10	16	25	35	50	Impedance ratio	Z(-25°C) / Z(+20°C)	6	4	3	2	2	2	2	ZT/Z20 (MAX)	Z(-40°C) / Z(+20°C)	12	8	6	4	4	3	3
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Load Life	After 1000 hours application of rated voltage at 105°C capacitors meet the characteristics requirements listed at right. <table border="1" data-bbox="432 1451 983 1554"> <tbody> <tr> <td>Leakage Current</td> <td>Specified value or less</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>200% or less of specified value</td> </tr> </tbody> </table>	Leakage Current	Specified value or less	Capacitance Change	Within ±20% of initial value	Dissipation Factor	200% or less of specified value																					
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Shelf Life	After leaving capacitors under no load at 105°C for 500hours 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

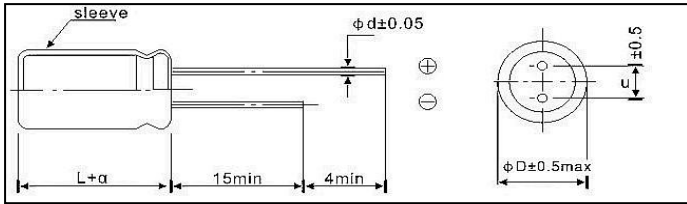
Frequency coefficient

W.V	Frequency(Hz)					
	Cap(uF)	60 (50)	120	300	1k	10k~
4~50	0.1~47	0.80	1.00	1.20	1.30	1.50
	100~220	0.80	1.00	1.10	1.15	1.20

Temperature	65°C	75°C	85°C	105°C
Coefficient	1.78	1.70	1.40	1.00

S5 series 105°C 5mmL

■DIMENSIONS(mm)



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

■STANDARD SIZE PERMISSIBLE RIPPLE CURRENT

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

W.V Cap(μF)	4		6.3		10		16		25		35		50	
	SIZE	Ripple	SIZE	Ripple	SIZE	Ripple	SIZE	Ripple	SIZE	Ripple	SIZE	Ripple	SIZE	Ripple
0.1													4×5	1
0.22													4×5	2.5
0.33													4×5	4
0.47													4×5	6
1													4×5	8.6
2.2											4×5	9	4×5	9.1
3.3									4×5	11	4×5	12	4×5	13
4.7							4×5	11	4×5	13	4×5	14	5×5	20
10			4×5	14	4×5	16	4×5	18	4×5 5×5	20 27	5×5	30	6.3×5	34
22	4×5	20	4×5	22	4×5 5×5	23 30	4×5 5×5	19 35	6.3×5	46	6.3×5	50		
33	4×5	27	5×5	34	5×5	45	6.3×5	51	6.3×5	54				
47	4×5	37	4×5 5×5	28 40	6.3×5	50	5×5 6.3×5	50 65	6.3×5	70				
100	5×5	62	6.3×5	65	6.3×5	80	6.3×5	85	8×5	105				
150					8×5	95								
220	6.3×5	74	6.3×5	80	8×5	90	8×5	105						