

## AS series Low ESR, Long Life & High Voltage



### Features

- ◆ Voltage Range: 16 to 100Vdc, Capacitance Range: 10 to 560  $\mu$ F
- ◆ Endurance Range: 105°C 3,000 hours to 10,000 hours
- ◆ RoHS Compliant
- ◆ AEC-Q200 Compliant

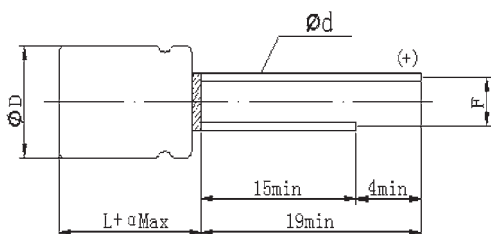
### Specifications

Items	Performance Characteristics																	
Operating Temperature Range	-55°C~+105°C																	
Rated Voltage Range	16~100V DC																	
Surge Voltage (V)	<table border="1"> <tr> <td>16</td><td>25</td><td>35</td><td>40</td><td>50</td><td>63</td><td>80</td><td>100</td> </tr> <tr> <td>20</td><td>32</td><td>44</td><td>50</td><td>63</td><td>79</td><td>100</td><td>125</td> </tr> </table>		16	25	35	40	50	63	80	100	20	32	44	50	63	79	100	125
16	25	35	40	50	63	80	100											
20	32	44	50	63	79	100	125											
Capacitance Range	10 to 560 $\mu$ F																	
Capacitance Tolerance	$\pm$ 20% ( 120Hz , +20°C )																	
Leakage Current ( +20°C , max )	0.01CV or 3 $\mu$ A, whichever is greater ( Rated voltage applied, after 2 minutes at 20°C )																	
Dissipation Factor (tan $\delta$ , at 120Hz , 20°C)	Not to exceed the values shown in Standard Ratings																	
ESR ( at 100kHz , 20°C )	Not to exceed the values shown in Standard Ratings																	
Endurance	105°C rated voltage applied (with the rated ripple current)	Test																
		16V	$\phi$ 6.3: 3,000hours, D $\geq$ $\phi$ 8: 7,000hours															
		$\geq$ 25V	$\phi$ 6.3: 5,000hours, D $\geq$ $\phi$ 8: 10,000hours															
		$\Delta$ C/C	Within $\pm$ 30% of the initial value															
		tan $\delta$	Less than 200% of the specified value															
		ESR	Less than 200% of the specified value															
		LC	Less than the specified value															

### Multiplier for Ripple Current vs. Frequency

Frequency	120Hz $\leq$ freq.<1kHz	1KHz $\leq$ freq.<10kHz	10kHz $\leq$ freq.<100kHz	100kHz $\leq$ freq.<300kHz
Coefficient	0.1	0.3	0.6	1.0

### Diagram of Dimensions:(unit:mm)



$\phi$ DxL	$\phi$ D+0.5max.	$\alpha$	F $\pm$ 0.5	$\phi$ d $\pm$ 0.05
6.3x8	6.3	1.0	2.5	0.6
8x9	8.0	1.5	3.5	0.6
10x10	10.0	1.5	5.0	0.6
10x12.5	10.0	1.5	5.0	0.6

## Standard Ratings

W.V. (V)	Cap(μF)	Size φ DxL(mm)	L.C. (μA,2min)	tg δ (120Hz,20°C)	ESR (mΩ),100KHz)	Maximum Permissible Ripple Current(mA,r.m.s)
16	120	6.3x8	19.2	0.16	40	1500
	270	8x9	43.2	0.16	26	2000
	470	10x10	75.2	0.16	21	2600
	560	10x12.5	89.6	0.16	15	3000
25	68	6.3x8	17	0.16	45	1400
	150	8x9	37.5	0.16	27	1900
	270	10x10	67.5	0.16	22	2530
	330	10x12.5	82.5	0.16	16	2900
35	47	6.3x8	16.5	0.16	60	1300
	100	8x9	35	0.16	30	1800
	150	10x10	52.5	0.16	23	2470
	220	10x12.5	77	0.16	17	2830
40	27	6.3x8	10.8	0.16	70	1250
	56	8x9	22.4	0.16	32	1750
	100	10x10	40	0.16	24	2400
	120	10x10	48	0.16	18	2750
50	15	6.3x8	7.5	0.16	80	1200
	33	8x9	16.5	0.16	35	1670
	56	10x10	28	0.16	25	2320
	82	10x12.5	41	0.16	19	2650
63	10	6.3x8	6.3	0.16	100	1060
	22	8x9	13.9	0.16	40	1560
	33	10x10	20.8	0.16	30	2100
	47	10x10	29.6	0.16	30	2100
	56	10x12.5	35.3	0.16	22	2400
80	12	10x10	9.6	0.16	70	1600
	15	10x10	12	0.16	70	1600
	18	10x12.5	14.4	0.16	50	1830
100	10	10x10	10	0.16	80	1450
	12	10x10	12	0.16	80	1450
	15	10x12.5	15	0.16	60	1660

Ripple Current(mA,rms)at 105°C,100KHz