

**VXG SERIES**

105°C 5000 hours

\*Load Life : 105°C 5000 hours.



◆SPECIFICATIONS

Items	Characteristics																									
Category Temperature Range	-40~+105°C	-25~+105°C																								
Rated Voltage Range	10~100Vdc	200~500Vdc																								
Capacitance Tolerance	±20% (20°C, 120Hz)																									
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=Leakage Current(µA)      C=Capacitance(µF)      V=Rated Voltage(Vdc)																									
Dissipation Factor(MAX) (tanδ)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> <td>200~250</td> <td>400~450</td> <td>475~500</td> </tr> <tr> <td>tanδ</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.25</td> </tr> </table> (20°C, 120Hz)		Rated Voltage (Vdc)	10	16	25	35	50	63	80	100	200~250	400~450	475~500	tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20	0.25
Rated Voltage (Vdc)	10	16	25	35	50	63	80	100	200~250	400~450	475~500															
tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20	0.25															
Endurance	After applying rated voltage with rated ripple current for 5000 hours at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20%(For 10WV ; ±25%)of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>		Capacitance Change	Within ±20%(For 10WV ; ±25%)of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																		
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>10~100</td> <td>200~250</td> <td>400~450</td> <td>475~500</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>8</td> <td>12</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table> (120Hz)		Rated Voltage (Vdc)	10~100	200~250	400~450	475~500	Z(-25°C)/Z(20°C)	3	3	8	12	Z(-40°C)/Z(20°C)	12	-	-	-									
Rated Voltage (Vdc)	10~100	200~250	400~450	475~500																						
Z(-25°C)/Z(20°C)	3	3	8	12																						
Z(-40°C)/Z(20°C)	12	-	-	-																						

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	60 (50)	120 (100)	300	500	1k	10k≤
10~100Vdc	0.90	1.00	1.03	1.05	1.10	1.15
200~250Vdc	0.80	1.00	1.15	1.20	1.30	1.50
400~500Vdc	0.80	1.00	1.15	1.20	1.25	1.40

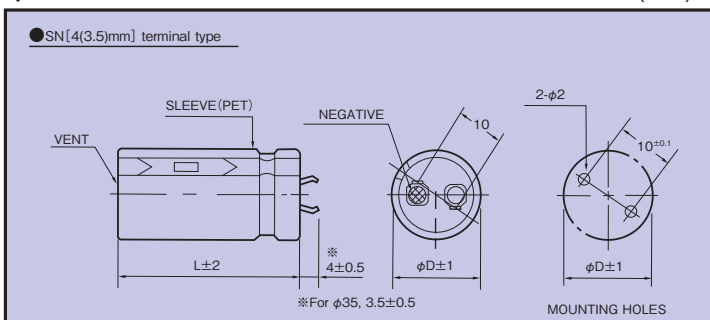
◆OPTION

Option	Code
PET Sleeve without plate	EFC

◆PART NUMBER



◆DIMENSIONS



**◆ STANDARD SIZE**

Cap(μF)	Vdc φD	10				16			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
5600									
6800						22×25: 1.44			
8200		22×25: 1.36				22×30: 1.66			
10000		22×25: 1.36				22×30: 1.79	25×25: 1.67		
12000		22×30: 1.65				22×35: 2.08	25×30: 2.07		
15000		22×35: 1.85	25×25: 1.82			22×40: 2.36	25×35: 2.37	30×25: 2.13	
18000		22×40: 2.12	25×30: 2.11	30×25: 2.14		22×45: 2.69	25×40: 2.72	30×30: 2.54	
22000		22×45: 2.40	25×35: 2.32	30×30: 2.37			25×45: 3.06	30×35: 3.02	35×30: 3.09
27000			25×40: 2.59	30×30: 2.73			25×50: 3.39	30×40: 3.46	35×30: 3.31
33000			25×45: 3.01	30×35: 3.13	35×30: 3.05			30×45: 3.88	35×35: 3.85
39000			25×50: 3.43	30×40: 3.53	35×35: 3.49			30×50: 4.33	35×40: 4.33
47000				30×45: 3.78	35×40: 3.96				35×45: 4.96
56000				30×50: 4.58	35×45: 4.60				35×50: 5.49
				35×50: 5.06					

Cap(μF)	Vdc φD	25				35			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
2700						22×25: 1.29			
3300						22×30: 1.54			
3900		22×25: 1.31				22×35: 1.77	25×25: 1.55		
4700		22×30: 1.55				22×40: 2.01	25×30: 1.87		
5600		22×35: 1.77	25×25: 1.56			22×45: 2.25	25×35: 2.18	30×25: 1.80	
6800		22×40: 2.02	25×30: 1.88			22×50: 2.49	25×40: 2.45	30×30: 2.28	
8200		22×45: 2.27	25×35: 2.18	30×25: 1.92			25×45: 2.80	30×35: 2.69	
10000		22×50: 2.56	25×40: 2.53	30×30: 2.38				30×40: 3.04	35×30: 2.78
12000			25×45: 2.79	30×35: 2.70	35×30: 2.76			30×45: 3.38	35×35: 3.30
15000				30×40: 3.13	35×30: 3.00				35×40: 3.88
18000				30×45: 3.52	35×35: 3.50				35×45: 4.40
22000				30×50: 3.92	35×40: 3.95				
27000				35×50: 4.72					

Cap(μF)	Vdc φD	50				63			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
1000						22×25: 1.10			
1200						22×25: 1.17			
1500		22×25: 1.21				22×30: 1.41	25×25: 1.38		
1800		22×25: 1.28				22×35: 1.62	25×30: 1.63		
2200		22×30: 1.52	25×25: 1.46			22×40: 1.85	25×30: 1.75	30×25: 1.66	
2700		22×35: 1.77	25×30: 1.76			22×45: 2.10	25×35: 2.03	30×30: 2.01	
3300		22×40: 2.02	25×30: 1.87	30×25: 1.72			25×40: 2.33	30×30: 2.15	
3900		22×45: 2.27	25×35: 2.20	30×30: 2.09			25×45: 2.58	30×35: 2.46	35×30: 2.31
4700			25×40: 2.43	30×30: 2.22				30×40: 2.82	35×35: 2.77
5600			25×45: 2.72	30×35: 2.58	35×30: 2.35			30×45: 3.22	35×40: 3.20
6800				30×40: 3.01	35×35: 2.91				35×45: 3.61
8200				30×50: 3.63	35×40: 3.36				35×50: 3.94
10000					35×45: 3.79				
12000					35×50: 4.06				

Cap(μF)	Vdc φD	80				100			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
560						22×25: 1.01			
680						22×30: 1.19			
820		22×25: 1.09				22×35: 1.33	25×25: 1.26		
1000		22×30: 1.29				22×40: 1.56	25×30: 1.52	30×25: 1.47	
1200		22×35: 1.48	25×25: 1.32			22×45: 1.76	25×35: 1.76	30×30: 1.76	
1500		22×40: 1.70	25×30: 1.74	30×25: 1.58		22×50: 2.00	25×40: 2.03	30×30: 1.89	
1800		22×45: 1.91	25×35: 1.86	30×25: 1.68			25×45: 2.29	30×35: 2.19	35×30: 2.05
2200			25×45: 2.22	30×30: 2.02				30×40: 2.52	35×35: 2.48
2700				30×35: 2.50	35×30: 2.18			30×45: 2.86	35×40: 2.87
3300				30×40: 2.69	35×35: 2.60				35×45: 3.25
3900				30×45: 2.94	35×40: 3.00				35×50: 3.56
4700					35×45: 3.44				
5600					35×50: 3.72				

↑ Ripple Current (A r.m.s./120Hz, 105°C)  
Case Size φD×L(mm)

**◆ STANDARD SIZE**

Cap(μF)	Vdc φD	200				220			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
270		22×25: 1.31				22×25: 1.31			
330		22×30: 1.53				22×30: 1.53			
390		22×30: 1.61	25×25: 1.49			22×35: 1.73	25×25: 1.49		
470		22×35: 1.84	25×30: 1.75			22×40: 1.96	25×30: 1.73		
560		22×40: 2.07	25×30: 1.81			22×45: 2.18	25×35: 1.97	30×25: 1.60	
680		22×45: 2.32	25×35: 2.07	30×25: 1.67		22×50: 2.43	25×40: 2.23	30×30: 1.89	35×25: 1.58
820		22×50: 2.58	25×40: 2.33	30×30: 1.95	35×25: 1.65	22×60: 2.80	25×45: 2.48	30×35: 2.17	35×30: 1.91
1000			25×45: 2.62	30×35: 2.23	35×30: 1.94		25×50: 2.77	30×40: 2.43	35×35: 2.21
1200				30×40: 2.50	35×35: 2.24		25×60: 3.16	30×45: 2.68	35×40: 2.48
1500				30×45: 2.82	35×40: 2.56			30×50: 3.01	35×40: 2.50
1800					35×45: 2.85			30×60: 3.48	35×50: 3.04
2200					35×50: 3.14				35×60: 3.40

Cap(μF)	Vdc φD	250				400			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
82						22×25: 0.77			
100						22×30: 0.89			
120						22×30: 0.96	25×25: 0.95		
150						22×35: 1.11	25×30: 1.11		
180						22×40: 1.25	25×35: 1.26	30×25: 1.16	
220		22×25: 1.22				22×50: 1.47	25×35: 1.35	30×30: 1.35	35×25: 1.26
270		22×30: 1.43				22×55: 1.65	25×45: 1.61	30×35: 1.54	35×30: 1.48
330		22×35: 1.64	25×25: 1.39				25×50: 1.80	30×40: 1.74	35×30: 1.54
390		22×40: 1.84	25×30: 1.65				25×55: 1.99	30×45: 1.93	35×35: 1.74
470		22×45: 2.06	25×35: 1.88	30×25: 1.55				30×50: 2.14	35×40: 1.95
560		22×50: 2.29	25×40: 2.11	30×30: 1.84	35×25: 1.56			30×60: 2.44	35×45: 2.19
680		22×55: 2.54	25×45: 2.36	30×35: 2.11	35×30: 1.80				35×50: 2.40
820			25×50: 2.61	30×40: 2.36	35×30: 1.81				35×60: 2.77
1000			25×60: 3.02	30×45: 2.63	35×35: 2.38				
1200				30×50: 2.85	35×40: 2.41				
1500				30×60: 3.31	35×50: 2.92				
1800					35×55: 3.12				

Cap(μF)	Vdc φD	420				450			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
82		22×25: 0.75				22×25: 0.76			
100		22×30: 0.87				22×30: 0.88	25×25: 0.86		
120		22×35: 0.99	25×25: 0.93			22×35: 1.00	25×30: 0.99		
150		22×40: 1.14	25×30: 1.08			22×40: 1.14	25×30: 1.09	30×25: 1.08	
180		22×45: 1.28	25×35: 1.23	30×25: 1.14		22×45: 1.29	25×35: 1.23	30×30: 1.24	
220		22×50: 1.44	25×40: 1.39	30×30: 1.32	35×25: 1.24	22×55: 1.49	25×40: 1.40	30×30: 1.32	35×25: 1.23
270		22×60: 1.66	25×45: 1.57	30×35: 1.51	35×30: 1.45		25×50: 1.64	30×35: 1.51	35×30: 1.45
330			25×50: 1.77	30×40: 1.71	35×35: 1.66			30×45: 1.80	35×35: 1.65
390			25×60: 2.01	30×45: 1.89	35×40: 1.86			30×50: 1.98	35×40: 1.85
470				30×50: 2.09	35×40: 1.93			30×55: 2.19	35×45: 2.05
560				30×60: 2.39	35×50: 2.27				35×50: 2.26
680					35×55: 2.48				35×55: 2.49
820					35×60: 2.69				

Cap(μF)	Vdc φD	475				500			
		φ22	φ25	φ30	φ35	φ22	φ25	φ30	φ35
47						22×25: 0.58			
56		22×25: 0.62				22×30: 0.66			
68		22×30: 0.71				22×30: 0.73	25×25: 0.72		
82		22×30: 0.77	25×25: 0.77			22×35: 0.83	25×30: 0.83	30×25: 0.83	
100		22×35: 0.89	25×30: 0.88			22×40: 0.94	25×35: 0.94	30×25: 0.91	
120		22×40: 1.00	25×30: 0.96	30×25: 0.96		22×50: 1.08	25×35: 1.02	30×30: 1.04	35×25: 1.01
150		22×45: 1.15	25×35: 1.11	30×30: 1.12		22×55: 1.24	25×45: 1.21	30×35: 1.19	35×30: 1.18
180		22×55: 1.32	25×40: 1.25	30×30: 1.20	35×25: 1.14	22×60: 1.38	25×50: 1.36	30×40: 1.34	35×30: 1.25
220			25×50: 1.45	30×35: 1.36	35×30: 1.33		25×55: 1.52	30×45: 1.51	35×40: 1.51
270			25×60: 1.68	30×40: 1.55	35×35: 1.52			30×50: 1.69	35×40: 1.62
330				30×55: 1.89	35×40: 1.71			30×55: 1.89	35×45: 1.81
390					35×50: 1.99				35×55: 2.08
470					35×60: 2.28				35×60: 2.28

↑ Ripple Current (A r.m.s./120Hz, 105°C)  
Case Size φD×L(mm)