

VXG SERIES

105°C 5000 hours

•Load Life : 105°C 5000 hours.

RoHS
compliance



◆SPECIFICATIONS

Items	Characteristics																																															
Category Temperature Range	-40~+105℃								-25~+105℃																																							
Rated Voltage Range	10~100Vdc								200~500Vdc																																							
Capacitance Tolerance	±20% (20℃, 120Hz)																																															
Leakage Current(MAX)	I=3√CV (After 5 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)																																															
Dissipation Factor(MAX) (tanδ)	<table><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℃, 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℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="11">Within ±20%(For 10WV ; ±25%)of the initial value.</td></tr><tr><td>Dissipation Factor</td><td colspan="11">Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td colspan="11">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><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℃)/Z(20℃)</td><td>3</td><td>3</td><td>8</td><td>12</td></tr><tr><td>Z(-40℃)/Z(20℃)</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℃)/Z(20℃)	3	3	8	12	Z(-40℃)/Z(20℃)	12	—	—	—																					
Rated Voltage (Vdc)	10~100	200~250	400~450	475~500																																												
Z(-25℃)/Z(20℃)	3	3	8	12																																												
Z(-40℃)/Z(20℃)	12	—	—	—																																												

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	60(50)	120(100)	300	500	1k	10k≤
Coefficient						
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

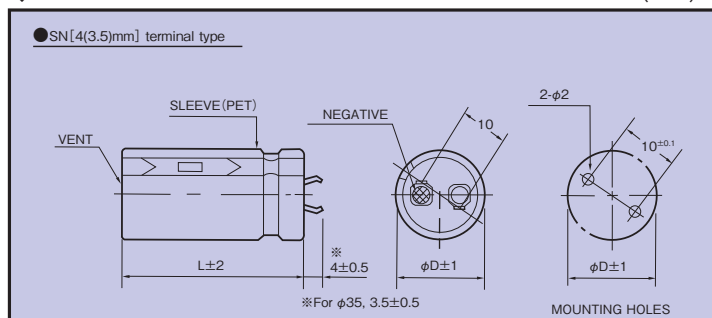
	Code
PET Sleeve without plate	EFC

◆PART NUMBER

□□□ VXG □□□□□ M □□□ SN D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆DIMENSIONS

(mm)



◆ STANDARD SIZE

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