

VXG SERIES

105°C 5000 hours Miniaturized, Snap-in Terminal Type

◆FEATURES

- Load Life : 105°C 5000 hours.
- Smaller size with higher ripple current endurance than VXP series.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																									
Category Temperature Range	-40 ~ +105°C	-25 ~ +105°C																								
Rated Voltage Range	10~100V.DC	200~450V.DC																								
Capacitance Tolerance	± 20%(20°C, 120Hz)																									
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=Leakage Current(µA) V=Rated Voltage(V) C=Rated Capacitance(µF)																									
Dissipation Factor(MAX) (tanδ)	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>200~250</th> <th>400~450</th> <th>(20°C, 120Hz)</th> </tr> </thead> <tbody> <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></td> </tr> </tbody> </table>		Rated Voltage(V)	10	16	25	35	50	63	80	100	200~250	400~450	(20°C, 120Hz)	tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20	
Rated Voltage(V)	10	16	25	35	50	63	80	100	200~250	400~450	(20°C, 120Hz)															
tanδ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20																
Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>10~100</th> <th>200~250</th> <th>400~450</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>8</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>-</td> <td>-</td> <td></td> </tr> </tbody> </table>		Rated Voltage(V)	10~100	200~250	400~450	(120Hz)	Z(-25°C)/Z(20°C)	3	3	8		Z(-40°C)/Z(20°C)	12	-	-										
Rated Voltage(V)	10~100	200~250	400~450	(120Hz)																						
Z(-25°C)/Z(20°C)	3	3	8																							
Z(-40°C)/Z(20°C)	12	-	-																							
Endurance	After applying rated voltage with rated ripple current for 5000hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <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> </tbody> </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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◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

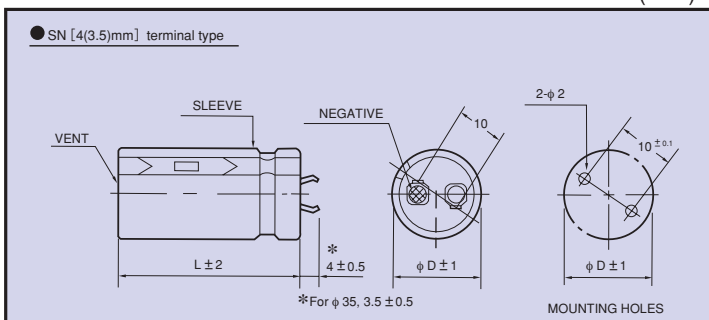
Frequency(Hz)		60(50)	120	500	1k	10k ≤
Coefficient	10~100WV	0.90	1.00	1.05	1.10	1.15
	200~250WV	0.80	1.00	1.20	1.30	1.50
	400~450WV	0.80	1.00	1.20	1.25	1.40

◆PART NUMBER

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

◆DIMENSIONS

(mm)



◆ STANDARD SIZE

Cap(μF)	WV φ D	10				16			
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
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)	WV φ D	25				35			
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
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)	WV φ D	50				63			
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
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)	WV φ D	80				100			
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35
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 φ D×L(mm)

◆ STANDARD SIZE

Cap(μF)	WV φ D	200				220								
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35					
270	22×25	1.09				22×25	1.04							
330	22×30	1.31				22×30	1.26							
390	22×30	1.32	25×25	1.27		22×35	1.47	25×25	1.21					
470	22×35	1.54	25×30	1.54		22×40	1.64	25×30	1.47					
560	22×40	1.75	25×30	1.54		22×45	1.86	25×35	1.71	30×25	1.41			
680	22×45	1.96	25×35	1.79	30×25	1.46	22×50	2.05	25×40	1.94	30×30	1.71	35×25	1.54
820	22×50	2.15	25×40	2.03	30×30	1.77	35×25	1.59	25×45	2.16	30×35	1.99	35×30	1.89
1000			25×45	2.26	30×35	2.06	35×30	1.93	25×50	2.37	30×40	2.26	35×35	2.15
1200					30×40	2.34	35×35	2.22			30×45	2.51	35×40	2.48
1500					30×45	2.60	35×40	2.56			30×50	2.75	35×40	2.50
1800							35×45	2.85					35×50	3.04
2200							35×50	3.14						

Cap(μF)	WV φ D	250				400							
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35				
82						22×25	0.64						
100						22×30	0.74						
120						22×30	0.79	25×25	0.79				
150						22×35	0.92	25×30	0.95				
180						22×40	1.05	25×35	1.10	30×25	0.97		
220	22×25	0.97				22×50	1.28	25×35	1.12	30×30	1.17	35×25	1.10
270	22×30	1.18						25×45	1.40	30×35	1.36	35×30	1.33
330	22×35	1.37	25×25	1.14				25×50	1.55	30×40	1.55	35×30	1.35
390	22×40	1.56	25×30	1.38						30×45	1.72	35×35	1.53
470	22×45	1.74	25×35	1.61	30×25	1.34				30×50	1.89	35×40	1.78
560	22×50	1.92	25×40	1.83	30×30	1.63	35×25	1.48				35×45	1.98
680			25×45	2.04	30×35	1.90	35×30	1.80				35×50	2.19
820			25×50	2.24	30×40	2.15	35×30	1.81					
1000					30×45	2.39	35×35	2.38					
1200					30×50	2.62	35×40	2.39					
1500							35×50	2.92					

Cap(μF)	WV φ D	420				450								
		φ 22	φ 25	φ 30	φ 35	φ 22	φ 25	φ 30	φ 35					
82	22×25	0.61				22×25	0.60							
100	22×30	0.74				22×30	0.73	25×25	0.72					
120	22×35	0.86	25×25	0.75		22×35	0.84	25×30	0.87					
150	22×40	0.98	25×30	0.90		22×40	0.97	25×30	0.89	30×25	0.90			
180	22×45	1.09	25×35	1.05	30×25	0.93	22×45	1.08	25×35	1.03	30×30	1.08		
220	22×50	1.21	25×40	1.19	30×30	1.12	35×25	1.05	25×40	1.17	30×30	1.10	35×25	1.04
270			25×45	1.34	30×35	1.30	35×30	1.27	25×50	1.43	30×35	1.28	35×30	1.25
330					30×40	1.47	35×35	1.45			30×45	1.45	35×35	1.43
390					30×45	1.64	35×40	1.68			30×50	1.75	35×40	1.66
470					30×50	1.81	35×40	1.71					35×45	1.85
560							35×50	2.07					35×50	2.04

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