

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

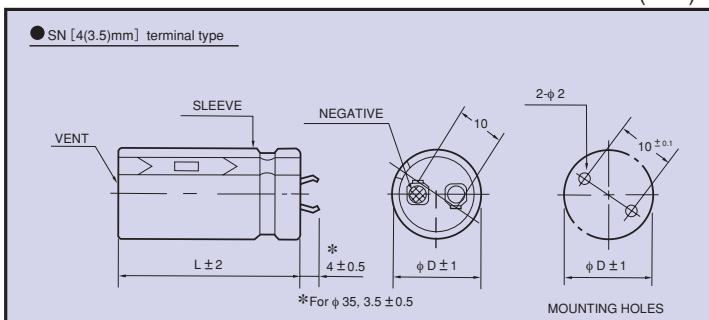
Frequency(Hz)		60(50)	120	500	1k	10k ≤
Coefficient	10~100WV	0.90	1.00	1.05	1.10	1.15
	200~250WV	0.80	1.00	1.20	1.30	1.50
	400~450WV	0.80	1.00	1.20	1.25	1.40

◆ **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						22x25	1.44				
6800						22x30	1.66				
8200	22x25	1.36				22x30	1.79	25x25	1.67		
10000	22x30	1.65				22x35	2.08	25x30	2.07		
12000	22x35	1.85	25x25	1.82		22x40	2.36	25x35	2.37	30x25	2.13
15000	22x40	2.12	25x30	2.11	30x25	2.14					
18000	22x45	2.40	25x35	2.32	30x30	2.37					
22000			25x40	2.59	30x30	2.73					
27000			25x45	3.01	30x35	3.13	35x30	3.05			
33000			25x50	3.43	30x40	3.53	35x35	3.49			
39000					30x45	3.78	35x40	3.96			
47000					30x50	4.58	35x45	4.60			
56000							35x50	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						22x25	1.29						
3300						22x30	1.54						
3900	22x25	1.31				22x35	1.77	25x25	1.55				
4700	22x30	1.55				22x40	2.01	25x30	1.87				
5600	22x35	1.77	25x25	1.56		22x45	2.25	25x35	2.18	30x25	1.80		
6800	22x40	2.02	25x30	1.88		22x50	2.49	25x40	2.45	30x30	2.28		
8200	22x45	2.27	25x35	2.18	30x25	1.92		25x45	2.80	30x35	2.69		
10000	22x50	2.56	25x40	2.53	30x30	2.38				30x40	3.04	35x30	2.78
12000			25x45	2.79	30x35	2.70	35x30	2.76		30x45	3.38	35x35	3.30
15000					30x40	3.13	35x30	3.00				35x40	3.88
18000					30x45	3.52	35x35	3.50				35x45	4.40
22000					30x50	3.92	35x40	3.95					
27000							35x50	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						22x25	1.10						
1200						22x25	1.17						
1500	22x25	1.21				22x30	1.41	25x25	1.38				
1800	22x25	1.28				22x35	1.62	25x30	1.63				
2200	22x30	1.52	25x25	1.46		22x40	1.85	25x30	1.75	30x25	1.66		
2700	22x35	1.77	25x30	1.76		22x45	2.10	25x35	2.03	30x30	2.01		
3300	22x40	2.02	25x30	1.87	30x25	1.72		25x40	2.33	30x30	2.15		
3900	22x45	2.27	25x35	2.20	30x30	2.09		25x45	2.58	30x35	2.46	35x30	2.31
4700			25x40	2.43	30x30	2.22				30x40	2.82	35x35	2.77
5600			25x45	2.72	30x35	2.58	35x30	2.35		30x45	3.22	35x40	3.20
6800					30x40	3.01	35x35	2.91				35x45	3.61
8200					30x50	3.63	35x40	3.36				35x50	3.94
10000							35x45	3.79					
12000							35x50	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						22x25	1.01						
680						22x30	1.19						
820	22x25	1.09				22x35	1.33	25x25	1.26				
1000	22x30	1.29				22x40	1.56	25x30	1.52	30x25	1.47		
1200	22x35	1.48	25x25	1.32		22x45	1.76	25x35	1.76	30x30	1.76		
1500	22x40	1.70	25x30	1.74	30x25	1.58		25x40	2.03	30x30	1.89		
1800	22x45	1.91	25x35	1.86	30x25	1.68		25x45	2.29	30x35	2.19	35x30	2.05
2200			25x45	2.22	30x30	2.02				30x40	2.52	35x35	2.48
2700					30x35	2.50	35x30	2.18		30x45	2.86	35x40	2.87
3300					30x40	2.69	35x35	2.60				35x45	3.25
3900					30x45	2.94	35x40	3.00				35x50	3.56
4700							35x45	3.44					
5600							35x50	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	22x25	1.09				22x25	1.04							
330	22x30	1.31				22x30	1.26							
390	22x30	1.32	25x25	1.27		22x35	1.47	25x25	1.21					
470	22x35	1.54	25x30	1.54		22x40	1.64	25x30	1.47					
560	22x40	1.75	25x30	1.54		22x45	1.86	25x35	1.71	30x25	1.41			
680	22x45	1.96	25x35	1.79	30x25	1.46	22x50	2.05	25x40	1.94	30x30	1.71	35x25	1.54
820	22x50	2.15	25x40	2.03	30x30	1.77	35x25	1.59	25x45	2.16	30x35	1.99	35x30	1.89
1000			25x45	2.26	30x35	2.06	35x30	1.93	25x50	2.37	30x40	2.26	35x35	2.15
1200					30x40	2.34	35x35	2.22			30x45	2.51	35x40	2.48
1500					30x45	2.60	35x40	2.56			30x50	2.75	35x40	2.50
1800							35x45	2.85					35x50	3.04
2200							35x50	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						22x25	0.64						
100						22x30	0.74						
120						22x30	0.79	25x25	0.79				
150						22x35	0.92	25x30	0.95				
180						22x40	1.05	25x35	1.10	30x25	0.97		
220	22x25	0.97				22x50	1.28	25x35	1.12	30x30	1.17	35x25	1.10
270	22x30	1.18						25x45	1.40	30x35	1.36	35x30	1.33
330	22x35	1.37	25x25	1.14				25x50	1.55	30x40	1.55	35x30	1.35
390	22x40	1.56	25x30	1.38						30x45	1.72	35x35	1.53
470	22x45	1.74	25x35	1.61	30x25	1.34				30x50	1.89	35x40	1.78
560	22x50	1.92	25x40	1.83	30x30	1.63	35x25	1.48				35x45	1.98
680			25x45	2.04	30x35	1.90	35x30	1.80				35x50	2.19
820			25x50	2.24	30x40	2.15	35x30	1.81					
1000					30x45	2.39	35x35	2.38					
1200					30x50	2.62	35x40	2.39					
1500							35x50	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	22x25	0.61				22x25	0.60							
100	22x30	0.74				22x30	0.73	25x25	0.72					
120	22x35	0.86	25x25	0.75		22x35	0.84	25x30	0.87					
150	22x40	0.98	25x30	0.90		22x40	0.97	25x30	0.89	30x25	0.90			
180	22x45	1.09	25x35	1.05	30x25	0.93	22x45	1.08	25x35	1.03	30x30	1.08		
220	22x50	1.21	25x40	1.19	30x30	1.12	35x25	1.05	25x40	1.17	30x30	1.10	35x25	1.04
270			25x45	1.34	30x35	1.30	35x30	1.27	25x50	1.43	30x35	1.28	35x30	1.25
330					30x40	1.47	35x35	1.45			30x45	1.45	35x35	1.43
390					30x45	1.64	35x40	1.68			30x50	1.75	35x40	1.66
470					30x50	1.81	35x40	1.71					35x45	1.85
560							35x50	2.07					35x50	2.04

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