



# GVF Series

- High ripple current
- Load life 5,000 hours at 85°C



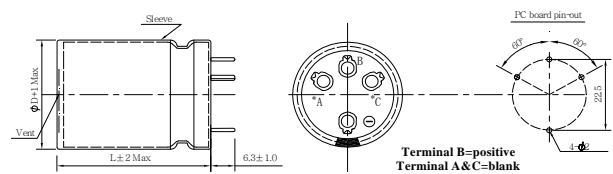
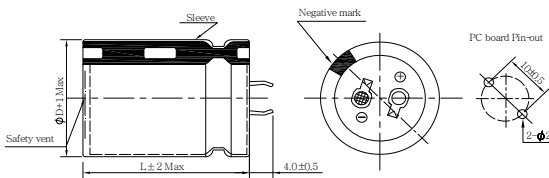
◆ SPECIFICATIONS

Item	Performance Characteristics										
Category Temperature Range	-25 ~ +85°C										
Working Voltage Range	200 ~ 500Vdc										
Capacitance Range	56 ~ 2200 μF										
Capacitance Tolerance	±20% (at 25°C and 120Hz)										
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>200 ~ 450</td> <td>500</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.15</td> <td>0.20</td> </tr> </table>	Rated Voltage (V)	200 ~ 450	500	tanδ(Max)	0.15	0.20				
	Rated Voltage (V)	200 ~ 450	500								
tanδ(Max)	0.15	0.20									
The above values should be increased by 0.02 for every additional 1000μF											
Leakage Current	I=0.02CV or 3000μA, whichever is smaller I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 5 minutes										
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>200 ~250</td> <td>400</td> <td>420 ~ 450</td> <td>500</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> </tr> </table> <p style="text-align: right;">(at 120Hz)</p>	Rated voltage (V)	200 ~250	400	420 ~ 450	500	Z(-25°C)/Z(+20°C)	4	4	8	8
Rated voltage (V)	200 ~250	400	420 ~ 450	500							
Z(-25°C)/Z(+20°C)	4	4	8	8							
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 5,000 hours at 85°C <table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ specified value				
Capacitance change	≒ ±20% of the initial value										
Dissipation factor(tanδ)	≒ 200% of the specified value										
Leakage current	≒ specified value										
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 85°C without voltage applied. <table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ 200% of the specified value</td> </tr> </table>	Capacitance change	≒ ±20% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ 200% of the specified value				
Capacitance change	≒ ±20% of the initial value										
Dissipation factor(tanδ)	≒ 200% of the specified value										
Leakage current	≒ 200% of the specified value										
Others	Conforms to JIS-C-5101-4 (1998), characteristic W										

◆ DIMENSIONS (mm)

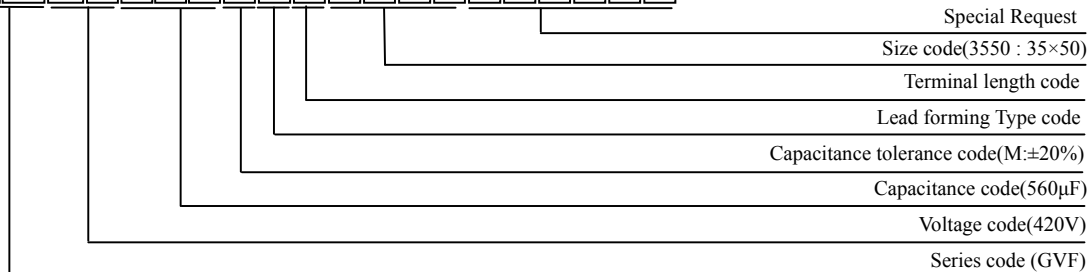
Terminal Code : ND : Standard

Terminal Code :K6 (ø35)



◆ PART NUMBER SYSTEM( Example : 420V 560μF )

G V F 2 S 5 6 1 M N D 3 5 5 0





# GVF Series

◆ Case size & Permissible rated ripple current (mA rms) at 85°C / 120Hz

Vdc ΦD uF	200								Vdc ΦD uF	220							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
270	22×25	1240							220	22×25	1265						
330	22×30	1450	25×25	1450					270	22×25	1390	25×25	1390				
390	22×30	1500	25×30	1500					330	22×30	1530	25×25	1530				
470	22×35	1760	25×30	1760	30×25	1760			390	22×35	1800	25×30	1800	30×25	1800		
560	22×40	2050	25×35	2050	30×25	2050			470	22×40	1910	25×35	1910	30×25	1910		
680	22×45	2500	25×40	2500	30×30	2500	35×25	2500	560	22×45	2200	25×40	2200	30×30	2200	35×25	2200
820			25×45	2740	30×35	2740	35×25	2740	680	22×50	2530	25×45	2530	30×35	2530	35×25	2530
1000			25×50	2985	30×40	2985	35×30	2985	820			25×50	2810	30×40	2810	35×30	2810
1200					30×45	3300	35×35	3300	1000					30×45	3050	35×35	3050
1500					30×50	3770	35×40	3770	1200					30×50	3375	35×40	3375
1800							35×45	3870	1500							35×45	3830
2200							35×50	4150	1800							35×50	3920

Vdc ΦD uF	250								Vdc ΦD uF	400							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
180	22×25	1100							82	22×25	770						
220	22×25	1300							100	22×30	920	25×25	920				
270	22×30	1450	25×25	1450					120	22×35	1090	25×25	1090				
330	22×35	1610	25×30	1610	30×25	1610			150	22×40	1210	25×30	1210	30×25	1210		
390	22×40	1890	25×35	1890	30×25	1890			180	22×45	1430	25×35	1430	30×30	1430	35×25	1430
470	22×45	2050	25×35	2050	30×30	2050	35×25	2050	220	22×45	1650	25×40	1650	30×30	1650	35×25	1650
560	22×50	2270	25×40	2270	30×35	2270	35×25	2270	270	22×50	1745	25×45	1745	30×35	1745	35×30	1745
680			25×50	2545	30×40	2545	35×30	2545	330			25×50	1940	30×40	1940	35×30	1940
820					30×45	2950	35×35	2950	390					30×45	2180	35×35	2180
1000					30×50	3200	35×40	3200	470					30×50	2460	35×40	2460
1200							35×45	3450	560							35×45	2630
1500							35×50	4000	680							35×50	3060

Vdc ΦD uF	420								Vdc ΦD uF	450							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
68	22×25	750							56	22×25	495						
82	22×25	775	25×25	775					68	22×25	770						
100	22×30	965	25×25	965					82	22×30	810	25×25	810				
120	22×35	1095	25×25	1095	30×25	1095			100	22×35	980	25×25	980				
150	22×40	1260	25×30	1260	30×25	1260	35×25	1260	120	22×40	1120	25×30	1120	30×25	1120		
180	22×45	1430	25×35	1430	30×30	1430	35×25	1430	150	22×45	1330	25×35	1330	30×30	1330	35×25	1330
220	22×50	1680	25×40	1680	30×35	1680	35×25	1680	180	22×50	1500	25×40	1500	30×35	1500	35×25	1500
270			25×45	1810	30×40	1810	35×30	1810	220			25×50	1740	30×40	1740	35×30	1740
330			25×50	1950	30×45	1950	35×35	1950	270					30×45	1905	35×35	1905
390					30×50	2250	35×40	2250	330					30×50	1995	35×40	1995
470							35×45	2520	390							35×45	2310
560							35×50	2700	470							35×50	2640

## GVF Series

◆ Case size & Permissible rated ripple current (mA rms) at 85°C / 120Hz

Vdc ΦD uF	500							
	Φ 22		Φ 25		Φ30		Φ35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
56	22×25	595						
68	22×30	630	25×25	630				
82	22×35	805	25×25	805				
100	22×40	900	25×30	900	30×25	900		
120	22×45	985	25×35	985	30×30	985	35×25	985
150	22×50	1350	25×40	1350	30×30	1350	35×25	1350
180			25×45	1400	30×35	1400	35×30	1400
220			25×50	1720	30×40	1720	35×30	1720
270					30×45	1865	35×35	1865
330					30×50	2030	35×40	2030
390							35×45	2225
470							35×50	2510

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50/60	120	1K	10K	100K
200 ~ 250	0.80	1.00	1.15	1.17	1.20
400 ~ 500	0.90	1.00	1.10	1.12	1.15