



GR Series

- 2,000 hours assured at 85°C



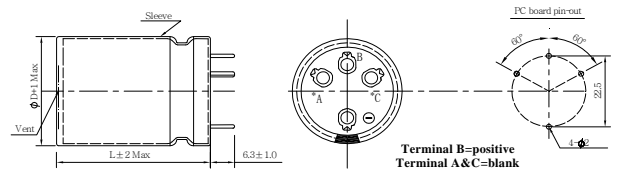
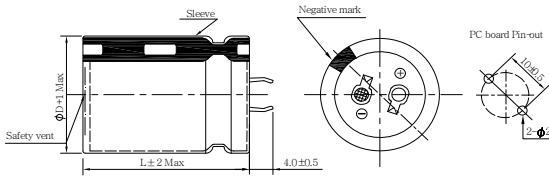
◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-25 ~ +85°C
Working Voltage Range	350 ~ 450Vdc
Capacitance Range	82 ~ 680 µF
Capacitance Tolerance	±20% (at 25°C and 120Hz)
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V) 350 400 420 450
	tanδ(Max) 0.15 0.15 0.15 0.15
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)	Rated voltage (V) 350 400 420 ~ 450
	Z(-25°C)/Z(+20°C) 4 4 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 2,000 hours at 85°C.
	Capacitance change ≍ ±15% of the initial value
	Dissipation factor(tanδ) ≍ 175% of the specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 85°C without voltage applied.
	Capacitance change ≍ ±15% of the initial value
	Dissipation factor(tanδ) ≍ 175% of the specified value
Others	Leakage current ≍ 200% of the specified value
	Conforms to JIS-C-5101-4 (1998), characteristic W

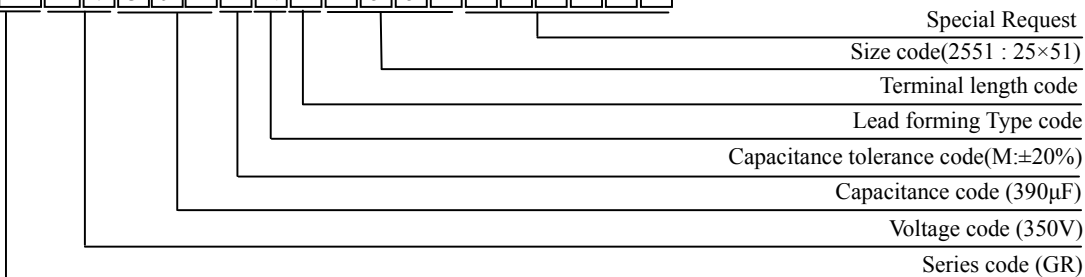
◆ DIMENSIONS (mm)

Terminal Code : ND : Standard

Terminal Code :K6 (ø35)



◆ PART NUMBER SYSTEM (Example : 350V 390µF)





GR Series

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

Vdc ΦD uF	350								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
100	22×25	760							100	22×25	920						
120	22×30	890	25×25	880					120	22×30	1070	25×25	1060				
150	22×30	990	25×25	980					150	22×30	1200	25×30	1260				
180	22×35	1150	25×30	1150	30×25	1150			180	22×35	1380	25×30	1380	30×25	1380		
220	22×40	1340	25×35	1340	30×25	1280			220	22×40	1620	25×35	1620	30×30	1620		
270	22×45	1630	25×40	1560	30×30	1500	35×25	1500	270	22×50	1880	25×40	1880	30×30	1790	35×25	1790
330			25×45	1800	30×35	1750	35×30	1750	330			25×50	2260	30×35	2080	35×30	2100
390			25×50	2040	30×40	1990	35×30	1900	390					30×40	2380	35×35	2420
470					30×45	2190	35×35	2220	470					30×45	2730	35×35	2630
560					30×50	2590	35×40	2540	560					30×50	3100	35×40	3010
680							35×45	2880	680							35×50	3590

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
82									82	22×25	830						
100	22×25	920							100	22×30	980	25×25	960				
120	22×30	1070	25×25	1060					120	22×30	1070	25×30	1130				
150	22×35	1260	25×30	1260					150	22×35	1260	25×30	1260	30×25	1260		
180	22×40	1460	25×35	1460	30×25	1380			180	22×40	1460	25×35	1460	30×30	1460		
220	22×45	1700	25×40	1700	30×30	1620	35×25	1620	220	22×50	1770	25×40	1700	30×30	1620	35×25	1620
270	22×50	1960	25×45	1960	30×35	1900	35×30	1900	270			25×45	1960	30×35	1900	35×30	1900
330			25×50	2260	30×40	2190	35×30	2100	330					30×40	2190	35×35	2230
390					30×45	2380	35×35	2400	390					30×45	2480	35×40	2510
470					30×50	2840	35×40	2750	470					30×50	2840	35×45	2880
560							35×45	3130	560							35×50	3260
680							35×50	3590	680								

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	60	120	300	1K	≥10K
350 ~ 450	0.80	1.00	1.10	1.30	1.40