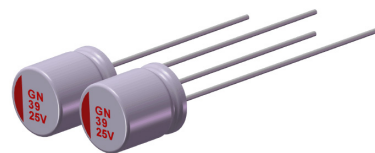


## GN series 系列

### Features 产品特点

- ◆ Low profile .
  - ◆ Low ESR at high frequency range & . Large permissible ripple current .
- 小尺寸产品，适合小型化电子设备。  
GN 系列具有低 ESR 和大纹波电流



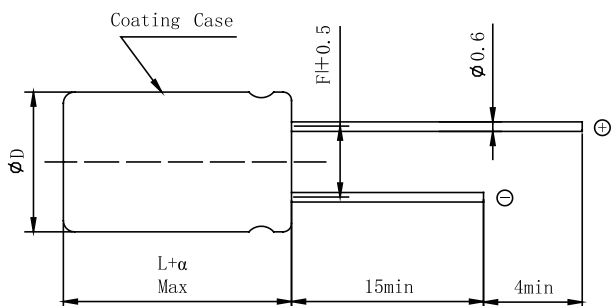
### Specifications 技术规范

Item 项目	Performance Characteristics 特性	
Operating Temperature Range 环境温度范围	-55 ~ +105°C	
Rated Voltage Range (V) 额定电压范围	2.5V ~ 25V DC	
Capacitance Range 容量范围	10 ~ 560 μF	
Capacitance Tolerance 静电容量允许偏差	M: ±20% (120Hz, +20°C)	
Leakage Current 漏电流	I≤0.2CV or 300 μA whichever is greater 二者取大值 (μA, after 2 minutes)	
Dissipation Factor 损耗角正切值 (20°C, 120Hz)	Not to exceed the value specified 不超过对应表中的规定值	
ESR (100KHz) 等效串联电阻	Not to exceed the value specified 不超过对应表中的规定值	
Load Life 耐久性 105°C, 2000h (高度 ≤5mm, 1000h) at rated voltage	Capacitance Change	Within ±20% of the value before test 初始值的 ±20% 以内
	Leakage Current	Not to exceed the value specified 不超过对应表中的规定值
	ESR	Not to exceed 150% of the value specified ≤ 初始规定值的 150%
	Dissipation Factor	Not to exceed 150% of the value specified ≤ 初始规定值的 150%
Resistance to Biased Humidity 耐湿负荷特性 Stored at 60°C, Rh90 ~ 95%, 1000h (高度 ≤5mm, 500h)	Capacitance Change	Within ±20% of the value before test 初始值的 ±20% 以内
	Leakage Current	Not to exceed the value specified 不超过对应表中的规定值
	ESR	Not to exceed 150% of the value specified ≤ 初始规定值的 150%
	Dissipation Factor	Not to exceed 150% of the value specified ≤ 初始规定值的 150%
在 60°C, 90 ~ 95%RH 环境中, 连续加载直流额定电压 1000 小时 (Φ 4x5、Φ 5x5: 500h) 后, 待温度恢复到 20°C 进行测量时, 应满足以上要求的特性。		

### Frequency Coefficient for Ripple Current 纹波电流频率校正系数

Frequency 频率	120Hz≤freq. < 1KHz	1KHz≤freq. < 10KHz	10KHz≤freq. < 100KHz	100KHz≤freq. < 300KHz
Coefficient 系数	0.05	0.3	0.7	1

### Diagram of Dimensions: (unit:mm) 尺寸图



Φ DxL	Φ D + 0.5max.	α	F	Φ d ± 0.05
4x5	4	1.0	1.5	0.45
5x5	5	1.0	2.0	0.45
5x8	5	1.0	2.0	0.45
5x9	5	1.0	2.0	0.5
6.3x5.2	6.3	1.0	2.5	0.5
6.3x7	6.3	1.0	2.5	0.6

**GN series 系列**

**Dimensions & Characteristics 尺寸及特性**

W.V. (V)	Capacitance ( $\mu$ F) 标称容量	L.C. 漏电 ( $\mu$ A, 2min)	Tg $\delta$ 损耗角正切 (120Hz, 20 $^{\circ}$ C)	ESR (m $\Omega$ , 100kHz)	Rated Ripple Current (mA, rms) 额定纹波电流 105 $^{\circ}$ C 100KHz	Size 尺寸 $\Phi$ DxL (mm)	P/N 产品编码
2.5 (2.9) 0E	100	300	0.08	30	1670	4x5	GCR0EGN101MC11G005
	100	300	0.08	30	1970	5x5	GCR0EGN101MC11H005
	150	300	0.08	30	1970	5x5	GCR0EGN151MC11H005
	150	300	0.08	30	2200	6.3x5.2	GCR0EGN151MC11J5R2
	180	300	0.08	30	1970	5x5	GCR0EGN181MC11H005
	180	300	0.08	30	2200	6.3x5.2	GCR0EGN181MC11J5R2
	220	300	0.08	30	2200	5x5	GCR0EGN221MC11H005
	220	300	0.08	30	2610	6.3x5.2	GCR0EGN221MC11J5R2
	270	300	0.08	25	2610	6.3x5.2	GCR0EGN271MC11J5R2
	270	300	0.08	12	2690	6.3x7	GCR0EGN271MC11J007
	330	300	0.08	15	2690	5x8	GCR0EGN331MC11H008
	330	300	0.08	12	2690	6.3x7	GCR0EGN331MC11J007
	390	300	0.08	15	2690	5x8	GCR0EGN391MC11H008
	390	300	0.08	12	2690	6.3x7	GCR0EGN391MC11J007
	470	300	0.08	15	2690	5x8	GCR0EGN471MC11H008
	470	300	0.08	12	2690	6.3x7	GCR0EGN471MC11J007
560	300	0.08	15	2690	5x8	GCR0EGN561MC11H008	
560	300	0.08	12	2690	6.3x7	GCR0EGN561MC11J007	
4.0 (4.6) 0G	100	300	0.08	30	1970	5x5	GCR0GGN101MC11H005
	150	300	0.08	30	2200	6.3x5.2	GCR0GGN151MC11J5R2
	180	300	0.08	30	2200	6.3x5.2	GCR0GGN181MC11J5R2
	220	300	0.08	15	2690	5x8	GCR0GGN221MC11H008
	220	300	0.08	12	2690	6.3x7	GCR0GGN221MC11J007
	270	300	0.08	15	2690	5x8	GCR0GGN271MC11H008
	270	300	0.08	12	2690	6.3x7	GCR0GGN271MC11J007
	330	300	0.08	15	2690	5x8	GCR0GGN331MC11H008
	330	300	0.08	12	2690	6.3x7	GCR0GGN331MC11J007
	390	312	0.08	15	2690	5x8	GCR0GGN391MC11H008
390	312	0.08	12	2690	6.3x7	GCR0GGN391MC11J007	
470	376	0.08	12	2690	6.3x7	GCR0GGN471MC11J007	
6.3 (7.2) 0J	100	300	0.08	25	2390	6.3x5.2	GCR0JGN101MC11J5R2
	150	300	0.08	25	2390	6.3x5.2	GCR0JGN151MC11J5R2
	180	300	0.08	20	2690	5x8	GCR0JGN181MC11H008
	180	300	0.08	12	2690	6.3x7	GCR0JGN181MC11J007
	220	300	0.08	15	3100	5x8	GCR0JGN221MC11H008
	220	300	0.08	12	3100	6.3x7	GCR0JGN221MC11J007
	270	340	0.08	15	3100	5x8	GCR0JGN271MC11H008
	270	340	0.08	12	3100	6.3x7	GCR0JGN271MC11J007
	330	415	0.08	15	3100	5x8	GCR0JGN331MC11H008
	330	415	0.08	12	3100	6.3x7	GCR0JGN331MC11J007
	390	491	0.08	12	3100	5x9	GCR0JGN391MC11H009
	390	491	0.08	12	3100	6.3x7	GCR0JGN391MC11J007
	470	592	0.08	12	3100	5x9	GCR0JGN471MC11H009
	470	592	0.08	12	3100	6.3x7	GCR0JGN471MC11J007
500	630	0.08	12	3100	5x9	GCR0JGN501MC11H009	
500	630	0.08	12	3100	6.3x7	GCR0JGN501MC11J007	

**GN series 系列**

Dimensions & Characteristics 尺寸及特性

W.V. (V)	Capacitance ( $\mu$ F) 标称容量	L.C. 漏电流 ( $\mu$ A,2min)	Tg $\delta$ 损耗角正切 (120Hz,20 $^{\circ}$ C)	ESR (m $\Omega$ ,100kHz)	Rated Ripple Current (mA, rms) 额定纹波电流 105 $^{\circ}$ C 100kHz	Size 尺寸 $\Phi$ DxL (mm)	P/N 产品编码
7.5 (8.6) 0P	180	300	0.08	15	2690	5x8	GCR0PGN181MC11H008
	220	330	0.08	15	3100	5x8	GCR0PGN221MC11H008
	220	330	0.08	12	3100	6.3x7	GCR0PGN221MC11J007
	270	405	0.08	12	3100	5x9	GCR0PGN271MC11H009
	270	405	0.08	12	3100	6.3x7	GCR0PGN271MC11J007
	330	495	0.08	12	3100	5x9	GCR0PGN331MC11H009
	330	495	0.08	12	3100	6.3x7	GCR0PGN331MC11J007
	390	585	0.08	12	3100	5x9	GCR0PGN391MC11H009
	390	585	0.08	12	3100	6.3x7	GCR0PGN391MC11J007
	470	705	0.08	12	3100	5x9	GCR0PGN471MC11H009
	470	705	0.08	12	3100	6.3x7	GCR0PGN471MC11J007
	500	750	0.08	12	3100	5x9	GCR0PGN501MC11H009
500	750	0.08	12	3100	6.3x7	GCR0PGN501MC11J007	
10 (11.5) 1A	10	300	0.08	45	1200	4x5	GCR1AGN100MC11G005
	15	300	0.08	45	1200	4x5	GCR1AGN150MC11G005
	22	300	0.08	45	1200	4x5	GCR1AGN220MC11G005
	33	300	0.08	45	1670	5x5	GCR1AGN330MC11H005
	33	300	0.08	30	2200	6.3x5.2	GCR1AGN330MC11J5R2
	39	300	0.08	45	1670	5x5	GCR1AGN390MC11H005
	39	300	0.08	30	2200	6.3x5.2	GCR1AGN390MC11J5R2
	47	300	0.08	30	2200	6.3x5.2	GCR1AGN470MC11J5R2
	68	300	0.08	30	2200	6.3x5.2	GCR1AGN680MC11J5R2
	82	300	0.08	30	2200	6.3x5.2	GCR1AGN820MC11J5R2
	100	300	0.08	30	2200	6.3x5.2	GCR1AGN101MC11J5R2
	150	300	0.08	15	2690	5x8	GCR1AGN151MC11H008
	150	300	0.08	15	2690	6.3x7	GCR1AGN151MC11J007
	180	360	0.08	15	2690	5x8	GCR1AGN181MC11H008
	180	360	0.08	15	2690	6.3x7	GCR1AGN181MC11J007
	220	440	0.08	15	2690	5x8	GCR1AGN221MC11H008
220	440	0.08	15	2690	6.3x7	GCR1AGN221MC11J007	
270	540	0.08	15	2690	6.3x7	GCR1AGN271MC11J007	
16 (18.4) 1C	10	300	0.08	30	2200	6.3x5.2	GCR1CGN100MC11J5R2
	15	300	0.08	30	2200	6.3x5.2	GCR1CGN150MC11J5R2
	22	300	0.08	30	2200	6.3x5.2	GCR1CGN220MC11J5R2
	33	300	0.08	30	2200	6.3x5.2	GCR1CGN330MC11J5R2
	39	300	0.08	30	2200	6.3x5.2	GCR1CGN390MC11J5R2
	47	300	0.08	30	2200	6.3x5.2	GCR1CGN470MC11J5R2
	47	300	0.08	25	2610	6.3x7	GCR1CGN470MC11J007
	68	300	0.08	20	2690	5x8	GCR1CGN680MC11H008
	68	300	0.08	20	2690	6.3x7	GCR1CGN680MC11J007
	82	300	0.08	20	2690	5x8	GCR1CGN820MC11H008
	82	300	0.08	20	2690	6.3x7	GCR1CGN820MC11J007
	100	320	0.08	20	2690	5x8	GCR1CGN101MC11H008
	100	320	0.08	20	2690	6.3x7	GCR1CGN101MC11J007
150	480	0.08	20	2690	6.3x7	GCR1CGN151MC11J007	
20 (23) 1D	10	300	0.08	30	2200	6.3x5.2	GCR1DGN100MC11J5R2
	15	300	0.08	30	2200	6.3x5.2	GCR1DGN150MC11J5R2
	22	300	0.08	30	2200	6.3x5.2	GCR1DGN220MC11J5R2
	22	300	0.08	25	2670	6.3x7	GCR1DGN220MC11J007

**GN series 系列**

Dimensions & Characteristics 尺寸及特性

W.V. (V)	Capacitance ( $\mu$ F) 标称容量	L.C. 漏电 ( $\mu$ A, 2min)	Tg $\delta$ 损耗角正切 (120Hz, 20 $^{\circ}$ C)	ESR (m $\Omega$ , 100kHz)	Rated Ripple Current (mA, rms) 额定纹波电流 105 $^{\circ}$ C 100KHz	Size 尺寸 $\Phi$ DxL (mm)	P/N 产品编码
20 (23) 1D	33	300	0.08	25	2670	5x8	GCR1DGN330MC11H008
	33	300	0.08	25	2670	6.3x7	GCR1DGN330MC11J007
	39	300	0.08	25	2670	5x8	GCR1DGN390MC11H008
	39	300	0.08	25	2670	6.3x7	GCR1DGN390MC11J007
	47	300	0.08	25	2670	5x8	GCR1DGN470MC11H008
	47	300	0.08	25	2670	6.3x7	GCR1DGN470MC11J007
25 (28.8) 1E	10	300	0.08	30	2200	6.3x5.2	GCR1EGN100MC11J5R2
	10	300	0.08	25	2670	6.3x7	GCR1EGN100MC11J007
	15	300	0.08	30	2200	6.3x5.2	GCR1EGN150MC11J5R2
	15	300	0.08	25	2670	6.3x7	GCR1EGN150MC11J007
	22	300	0.08	25	2670	5x8	GCR1EGN220MC11H008
	22	300	0.08	25	2670	6.3x7	GCR1EGN220MC11J007
	33	300	0.08	25	2670	5x8	GCR1EGN330MC11H008
	33	300	0.08	25	2670	6.3x7	GCR1EGN330MC11J007
	39	300	0.08	25	2670	6.3x7	GCR1EGN390MC11J007