



# GV Series

- Low ESR at a high frequency range
- High ripple current capability
- High voltage 25~100V
- 2,000 hours at 105°C

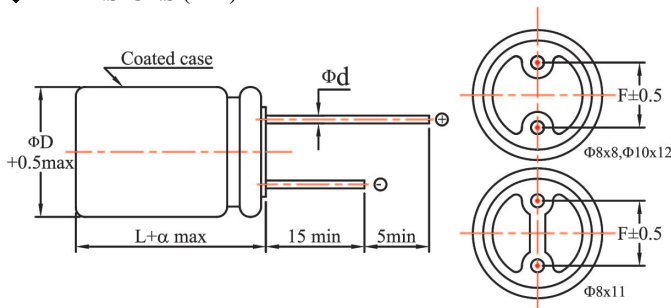


◆ SPECIFICATIONS

Item	Performance Characteristics	
Category Temperature Range	-55 ~ +105°C	
Working Voltage Range	25 ~ 100Vdc	
Surge Voltage	Rated Voltage x1.15	
Capacitance Tolerance	M: ±20% (at 25°C and 120Hz)	
ESR	See the standard ratings table (at 25°C, 100~300KHz)	
Dissipation Factor (Tanδ)	See the standard ratings table (at 25°C, 120Hz)	
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)	
Low Temperature Characteristics Impedance Ratio	Z(-25°C)/Z(+25°C) ≤ 1.15 at 100KHz Z(-55°C)/Z(+25°C) ≤ 1.25 at 100KHz	
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 105°C	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 60°C 90 to 95% RH	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
Leakage current	≤ specified value	

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C  
 ※2 ESR should be measured at both of the terminal ends closest to the capacitor body

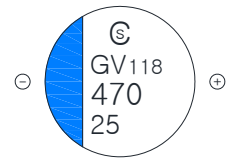
◆ DIMENSIONS (mm)



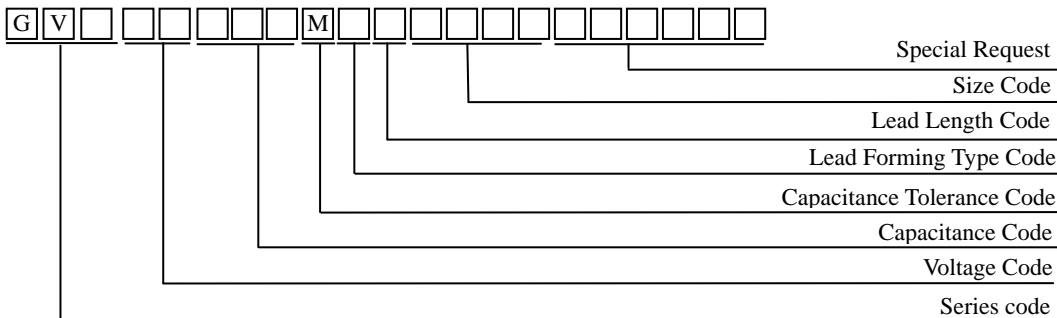
◆ Lead

ΦD	8	8	10
Φd	0.6	0.6	0.6
L	8	11	12
α	1	1.5	1.5
F	3.5	3.5	5

◆ Marking



◆ PART NUMBER SYSTEM





# GV Series

◆ Standard Ratings

Rated Voltage (Vdc)	Rated Capacitance (μF)	Case Size ΦD×L (mm)	ESR 100~300KHz (mΩ max)	Rated Ripple Current 105°C,100KHz (mA rms max)	Tan δ max	Leakage Current (μA max)	Part Number
25(1E)	150	6.3×8	18	3200	0.12	750	GV1E151MNN6308
	180	8×8	18	4100	0.12	900	GV1E181MNN0808
	180	8×11	16	4650	0.12	900	GV1E181MNN0811
	220	8×8	18	4100	0.12	1100	GV1E221MNN0808
	270	10×12	16	5000	0.12	1350	GV1E271MNN1012
	330	10×12	14	5000	0.12	1650	GV1E331MNN1012
	390	10×12	14	5000	0.12	1950	GV1E391MNN1012
	470	10×12	14	5000	0.12	2350	GV1E471MNN1012
35(1V)	18	8×11	34	2100	0.12	300	GV1V180MNN0811
	39	8×11	30	2100	0.12	300	GV1V390MNN0811
	47	8×11	30	2100	0.12	329	GV1V470MNN0811
	82	8×11	27	2300	0.12	574	GV1V820MNN0811
	100	8×11	27	2300	0.12	700	GV1V101MNN0811
	100	10×12	26	2700	0.12	700	GV1V101MNN1012
	120	10×12	26	2700	0.12	840	GV1V121MNN1012
	150	10×12	26	2700	0.12	1050	GV1V151MNN1012
50(1H)	27	8×11	33	2000	0.12	300	GV1H270MNN0811
	39	8×11	29	2200	0.12	390	GV1H390MNN0811
	47	10×12	29	2500	0.12	470	GV1H470MNN1012
	68	10×12	28	2600	0.12	680	GV1H680MNN1012
63(1J)	47	10×12	29	2600	0.12	592	GV1J470MNN1012
	68	10×12	29	2600	0.12	857	GV1J680MNN1012
100(2A)	18	8×11	40	1850	0.12	360	GV2A180MNN0811
	47	10×12	38	2100	0.12	940	GV2A470MNN1012