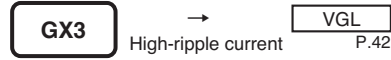


GX3 Series Useful of 8,000 hours at 105°C

- Conform RoHS

Features

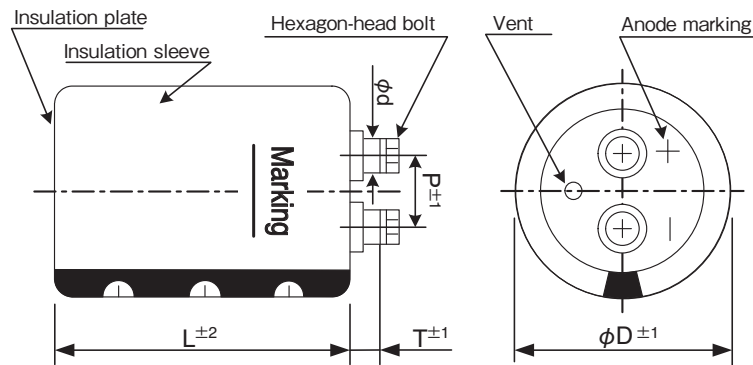
- GX3 series is the product developed for the purpose of the miniaturization as a capacitor for primary side filters of an inverter, DC servo, and a chopper control circuit.



Product Specifications

Items	Specifications
Temperature range	-40°C ~ +105°C
Rated voltage	400, 450V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (µA) or 5 mA, whichever is smaller or less (20°C, after 5 minutes) [C = nominal capacitance (µF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard products table. (105°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 105°C for 5,000 hours : Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Shelf life	The following specification shall be meet when the capacitor are restored to 20°C after storage of 500 hours at 105°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Others	JIS C 5101-4

Dimensions



(unit : mm)

φ D	P	T	φ d	Hexagon-head bolt	Cap material
51	22.0	5.5	10.0	M5×10	Phenol resin
64	28.6	5.5	10.0	M5×10	Phenol resin
77	31.5	5.0	10.0	M5×10	Phenol resin
90	31.5	5.0	10.0	M5×10	Phenol resin

Ripple current correction coefficient

Temperature (°C)	40	60	85	105	
Correction coefficient	2.44	2.16	2.00	1.00	
Frequency (Hz)	50/60	120	300	1K	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

Terminal permissible currents: 60Arms for M5.
Please use this type of capacitor at a terminal current below the permissible.

Product code

(Example) GX3 Series 400V 12,000µF±20%

GX3 2G 123 Y F 171

- Type of series
- Case height code
- Case dia code
- Type of bracket code
- Capacitance code
- Rated voltage code

Refer to page 21 for product code.

Bracket

- See page 22-23 for shapes and dimensions.
- Product names in the Standard Products Table correspond to the bracket for Type Y, but Type I bracket may be used (Type of bracket code = I).
- If bracket are not necessary, enter "N" for the type of bracket code.
- Bracket will be delivered separately.

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μ F)	Case size ϕ D \times L(mm)	$\tan\delta$ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (m Ω) 20°C, 100Hz	Z max (m Ω) 20°C, 10kHz	ESL(typ.) (nH)	Product name
400	1,800	51 \times 96	0.20	6.5	44	44	21	GX32G182YC096
	2,200	51 \times 115	0.20	7.7	42	44	21	GX32G222YC115
	2,700	51 \times 130	0.20	9.0	38	40	21	GX32G272YC130
	3,300	51 \times 155	0.20	10.7	30	35	21	GX32G332YC155
	3,900	64 \times 115	0.20	11.3	27	32	22	GX32G392YD115
		64 \times 130	0.20	13.0	22	23	22	GX32G472YD130
	4,700	77 \times 96	0.20	12.3	22	23	24	GX32G472YE096
		77 \times 115	0.20	14.4	20	21	24	GX32G562YE115
	6,800	77 \times 130	0.20	16.6	18	18	24	GX32G682YE130
	8,200	77 \times 171	0.20	20.3	15	17	24	GX32G822YE171
450	1,500	51 \times 96	0.20	4.9	53	55	21	GX32W152YC096
	1,800	51 \times 115	0.20	5.8	44	45	21	GX32W182YC115
	2,200	51 \times 130	0.20	6.7	42	44	21	GX32W222YC130
	2,700	64 \times 96	0.20	7.3	40	42	22	GX32W272YD096
	3,300	64 \times 130	0.20	9.1	35	35	22	GX32W332YD130
	3,900	77 \times 96	0.20	9.3	27	32	24	GX32W392YE096
	4,700	64 \times 155	0.20	11.6	24	27	22	GX32W472YD155
		77 \times 130	0.20	12.5	22	23	24	GX32W562YE130
	6,800	77 \times 155	0.20	14.7	20	20	24	GX32W682YE155
		90 \times 130	0.20	14.6	20	20	24	GX32W682YF130
8,200	90 \times 157	0.20	17.3	18	18	24	GX32W822YF157	
10,000	90 \times 171	0.20	19.7	15	15	24	GX32W103YF171	

ALUMINUM ELECTROLYTIC CAPACITORS

Life time graph

Useful life depending on ambient temperature T_a and ripple current operating conditions I versus rated ripple current at 105°C, 120Hz

