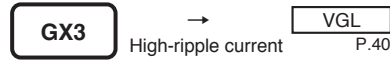


GX3 Series Useful of 8,000 hours at 105°C

- Conform RoHS

Features

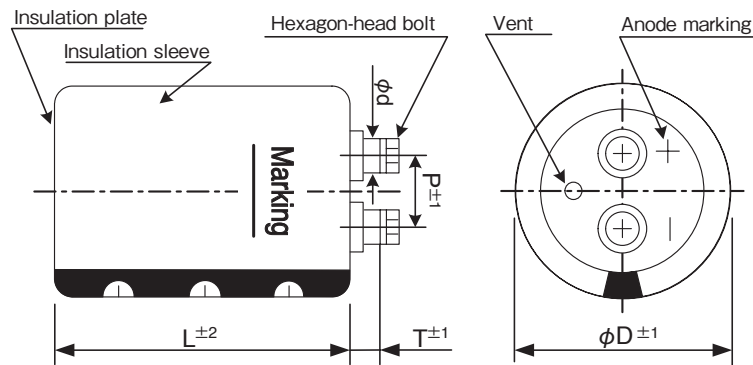
- GX3 series is the product developed for the purpose of the miniaturization as a capacitor for primary side filters of an inverter, DC servo, and a chopper control circuit.



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 5mA, 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)

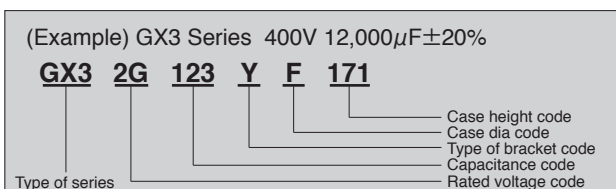
φD	P	T	φd	Hexagon-head bolt	Cap material
51	22.0	5.5	10.0	M5×10	Phenol resin
64	28.6	5.5	10.0	M5×10	Phenol resin
77	31.5	5.0	10.0	M5×10	Phenol resin
90	31.5	5.0	10.0	M5×10	Phenol resin

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



Refer to page 19 for product code.

Bracket

- See page 20-21 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.

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L(mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Z max (mΩ) 20°C, 10kHz	ESL(typ.) (nH)	Product name
400	1,800	51×96	0.20	6.5	44	44	21	GX32G182YC096
	2,200	51×115	0.20	7.7	42	44	21	GX32G222YC115
	2,700	51×130	0.20	9.0	38	40	21	GX32G272YC130
	3,300	51×155	0.20	10.7	30	35	21	GX32G332YC155
	3,900	64×115	0.20	11.3	27	32	22	GX32G392YD115
	4,700	64×130	0.20	13.0	22	23	22	GX32G472YD130
		77×96	0.20	12.3	22	23	24	GX32G472YE096
	5,600	77×115	0.20	14.4	20	21	24	GX32G562YE115
	6,800	77×130	0.20	16.6	18	18	24	GX32G682YE130
	8,200	77×171	0.20	20.3	15	17	24	GX32G822YE171
10,000	90×157	0.20	23.0	12	15	24	GX32G103YF157	
12,000	90×171	0.20	26.1	10	11	24	GX32G123YF171	
450	1,500	51×96	0.20	4.9	53	55	21	GX32W152YC096
	1,800	51×115	0.20	5.8	44	45	21	GX32W182YC115
	2,200	51×130	0.20	6.7	42	44	21	GX32W222YC130
	2,700	64×96	0.20	7.3	40	42	22	GX32W272YD096
	3,300	64×130	0.20	9.1	35	35	22	GX32W332YD130
	3,900	77×96	0.20	9.3	27	32	24	GX32W392YE096
	4,700	64×155	0.20	11.6	24	27	22	GX32W472YD155
	5,600	77×130	0.20	12.5	22	23	24	GX32W562YE130
		77×155	0.20	14.7	20	20	24	GX32W682YE155
	6,800	90×130	0.20	14.6	20	20	24	GX32W682YF130
		90×157	0.20	17.3	18	18	24	GX32W822YF157
	10,000	90×171	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

