

## GXA Series Useful of 8,000 hours at 105°C

- Conform RoHS

### Features

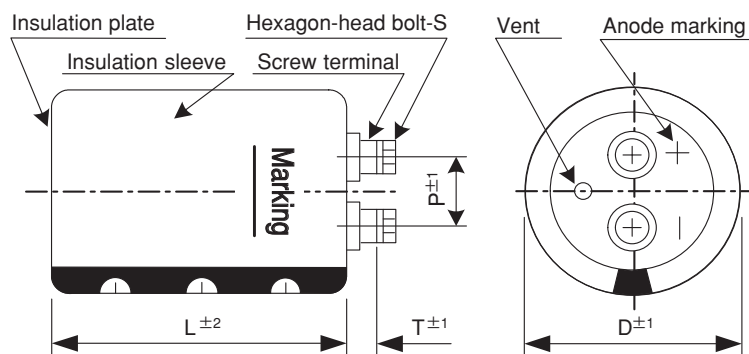
- Leading product with heat resistance and long life at 105°C to meet the requirement for high temperature and long life in the inverter circuit.



### Product Specifications

Items	Specifications
Temperature range	−40°C ~ +105°C
Rated voltage	350 ~ 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 initial value Dissipation factor : Not more than 175% of initial value specified Leakage current : Not more than 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 initial value Dissipation factor : Not more than 175% of initial value specified Leakage current : Not more than initial value specified
Others	JIS C 5101-4

### Dimensions



(unit : mm)

φ D	P	S	T	Cap material
51	22.0	M5×10	4.5	PPS
64	28.6	M5×10	4.5	PPS
77	32.0	M5×10	4.5	PPS
90	32.0	M5×10	4.0	PPS

### Ripple current correction coefficient

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

Product code : (Example) GXA Series 350V 4,700μF±20%				
GXA	2V	472	Y	(E)
E case (φD : 77mm) product				
Type of series	Rated voltage code	Capacitance code	Type of bracket code	Case dia code (*)

(\*) Case dia code in parentheses : If two types of shape exist for the same rating, enter the case dia code.

### Bracket

- Refer to page 21-22 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 ( $\mu$ F)	Case size $\phi$ DXL(mm)	$\tan\delta$ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (m $\Omega$ )	Z max 20°C, 10kHz (m $\Omega$ )	ESL(typ.) (nH)	Product name
350	1,000	51×75	0.15	3.9	100	103	21	GXA2V102Y
	1,200	51×75	0.15	4.2	84	87	21	GXA2V122Y
	1,500	51×96	0.15	5.2	67	69	21	GXA2V152Y
	1,800	51×96	0.15	5.7	55	57	21	GXA2V182Y
	2,200	51×130	0.15	7.1	45	47	21	GXA2V222Y
	2,700	64×96	0.15	7.7	37	39	22	GXA2V272Y
	3,300	64×115	0.15	9.1	29	31	22	GXA2V332Y
	3,900	64×130	0.15	10.4	25	27	22	GXA2V392Y
	4,700	64×155	0.15	12.2	20	21	22	GXA2V472YD
		77×115	0.15	11.5	20	21	24	GXA2V472YE
	5,600	64×195	0.15	14.6	17	20	22	GXA2V562YD
		77×130	0.15	13.1	17	20	24	GXA2V562YE
	6,800	77×155	0.15	15.5	14	18	24	GXA2V682Y
	8,200	90×157	0.15	18.1	12	15	24	GXA2V822Y
400	1,000	51×75	0.15	3.9	102	105	21	GXA2G102Y
	1,200	51×96	0.15	4.6	85	88	21	GXA2G122Y
	1,500	51×115	0.15	5.6	68	70	21	GXA2G152Y
	1,800	51×130	0.15	6.4	57	58	21	GXA2G182Y
	2,200	64×96	0.15	6.9	46	48	22	GXA2G222Y
	2,700	64×115	0.15	8.2	38	40	22	GXA2G272Y
	3,300	64×130	0.15	9.5	30	32	22	GXA2G332Y
	3,900	64×155	0.15	11.1	27	28	22	GXA2G392YD
		77×115	0.15	10.4	27	28	24	GXA2G392YE
	4,700	64×195	0.15	13.4	21	22	22	GXA2G472YD
		77×130	0.15	12.0	21	22	24	GXA2G472YE
	5,600	64×195	0.15	14.6	20	20	22	GXA2G562YD
		77×155	0.15	14.0	20	20	24	GXA2G562YE
	6,800	90×157	0.15	16.5	18	18	24	GXA2G682Y
450	1,000	51×96	0.15	4.2	102	105	21	GXA2W102Y
	1,200	51×115	0.15	5.0	85	88	21	GXA2W122Y
	1,500	51×130	0.15	5.9	68	70	21	GXA2W152Y
	1,800	64×96	0.15	6.3	57	58	22	GXA2W182Y
	2,200	64×115	0.15	7.4	46	48	22	GXA2W222Y
	2,700	64×130	0.15	8.6	40	42	22	GXA2W272YD
		77×115	0.15	8.7	40	42	24	GXA2W272YE
	3,300	64×155	0.15	10.2	30	35	22	GXA2W332YD
		77×130	0.15	10.1	30	35	24	GXA2W332YE
	3,900	64×195	0.15	12.3	27	32	22	GXA2W392Y
	4,700	77×155	0.15	12.9	24	27	24	GXA2W472Y
	5,600	77×195	0.15	15.4	22	23	24	GXA2W562YE
		90×157	0.15	14.9	22	23	24	GXA2W562YF
	6,800	90×196	0.15	18.0	20	20	24	GXA2W682Y
	8,200	90×196	0.15	19.8	18	18	24	GXA2W822Y
	10,000	90×236	0.15	23.6	15	15	24	GXA2W103Y

## Life time graph

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

