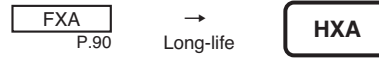


HXA Series Useful of 20,000 hours at 85°C

- Conform RoHS

Features

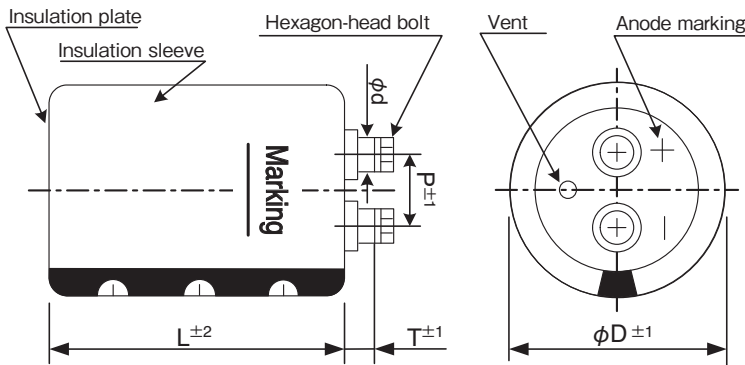
- High-reliability series with the warranty of 20,000 hours realized through improvement of the FXA series into a longer-life series



Product Specifications

Items	Specifications
Temperature range	-40°C ~ +85°C
Rated voltage	350 ~ 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. (85°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 85°C for 20,000 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 85°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

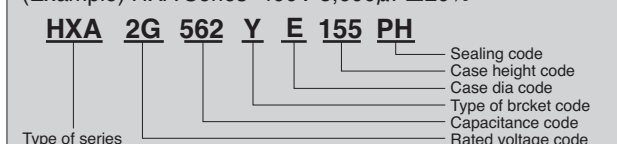
Ripple current correction coefficient

Temperature (°C)	40	60	85		
Correction coefficient	2.44	2.16	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) HXA Series 400V 5,600μF±20%



Refer to page 21 for product code.

Bracket

- Refer to 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

HXA Series

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L(mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 85°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Z max (mΩ) 20°C, 10kHz	ESL(typ.) (nH)	Product name
350	1,000	51×75	0.15	3.8	100	103	21	HXA2V102YC075PH
	1,200	51×75	0.15	4.2	84	87	21	HXA2V122YC075PH
	1,500	51×96	0.15	5.2	67	69	21	HXA2V152YC096PH
	1,800	51×96	0.15	5.6	55	57	21	HXA2V182YC096PH
	2,200	51×130	0.15	7.1	45	47	21	HXA2V222YC130PH
	2,700	64×96	0.15	7.6	37	39	22	HXA2V272YD096PH
	3,300	64×115	0.15	9.0	29	31	22	HXA2V332YD115PH
	3,900	64×130	0.15	10.3	25	27	22	HXA2V392YD130PH
	4,700	64×155	0.15	12.2	20	21	22	HXA2V472YD155PH
			0.15	11.5	20	21	24	HXA2V472YE115PH
	5,600	64×195	0.15	14.6	17	20	22	HXA2V562YD195PH
			0.15	13.1	17	20	24	HXA2V562YE130PH
	6,800	77×155	0.15	15.5	14	18	24	HXA2V682YE155PH
	8,200	90×157	0.15	18.1	12	15	24	HXA2V822YF157PH
	10,000	90×157	0.15	19.9	10	15	24	HXA2V103YF157PH
12,000	90×196	0.15	23.8	8	13	24	HXA2V123YF196PH	
15,000	90×236	0.15	28.8	7	10	24	HXA2V153YF236PH	
400	1,000	51×75	0.15	3.8	102	105	21	HXA2G102YC075PH
	1,200	51×96	0.15	4.6	85	88	21	HXA2G122YC096PH
	1,500	51×115	0.15	5.5	68	70	21	HXA2G152YC115PH
	1,800	51×130	0.15	6.4	57	58	21	HXA2G182YC130PH
	2,200	64×96	0.15	6.9	46	48	22	HXA2G222YD096PH
	2,700	64×115	0.15	8.2	38	40	22	HXA2G272YD115PH
	3,300	64×130	0.15	9.5	30	32	22	HXA2G332YD130PH
	3,900	64×155	0.15	11.1	27	28	22	HXA2G392YD155PH
			0.15	10.4	27	28	24	HXA2G392YE115PH
	4,700	64×195	0.15	13.4	21	22	22	HXA2G472YD195PH
			0.15	12.0	21	22	24	HXA2G472YE130PH
	5,600	64×195	0.15	14.6	20	20	22	HXA2G562YD195PH
			0.15	14.4	20	20	24	HXA2G562YE155PH
	6,800	90×157	0.15	16.5	18	18	24	HXA2G682YF157PH
	8,200	90×157	0.15	18.1	15	17	24	HXA2G822YF157PH
10,000	90×196	0.15	21.7	12	15	24	HXA2G103YF196PH	
12,000	90×236	0.15	25.8	10	12	24	HXA2G123YF236PH	
450	1,000	51×96	0.15	4.2	102	105	21	HXA2W102YC096PH
	1,200	51×115	0.15	5.0	85	88	21	HXA2W122YC115PH
	1,500	51×130	0.15	5.8	68	70	21	HXA2W152YC130PH
	1,800	64×96	0.15	6.2	57	58	22	HXA2W182YD096PH
	2,200	64×115	0.15	7.4	46	48	22	HXA2W222YD115PH
	2,700	64×130	0.15	8.6	40	42	22	HXA2W272YD130PH
			0.15	8.7	40	42	24	HXA2W272YE115PH
	3,300	64×155	0.15	10.2	30	35	22	HXA2W332YD155PH
			0.15	10.0	30	35	24	HXA2W332YE130PH
	3,900	64×195	0.15	12.2	27	32	22	HXA2W392YD195PH
	4,700	77×155	0.15	12.9	24	27	24	HXA2W472YE155PH
	5,600	77×195	0.15	15.4	22	23	24	HXA2W562YE195PH
			0.15	14.9	22	23	24	HXA2W562YF157PH
	6,800	90×196	0.15	18.0	20	20	24	HXA2W682YF196PH
	8,200	90×196	0.15	19.8	18	18	24	HXA2W822YF196PH
10,000	90×236	0.15	23.5	15	15	24	HXA2W103YF236PH	

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 85°C, 120Hz

