

## UCGXA Series (105°C 5000H)

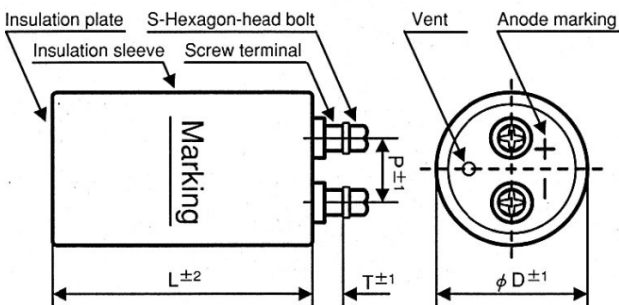
- Compliant to the RoHS directive
- High temperature & Long life design
- 105°C 5000H for Industrial Automation、Telecommunication Power Station、Medical Power Supply、Large Power Servo Driver...



### ◆ Specification

Item	Performance Characteristics	
Operating range	-25°C ~ +105°C	
Rated voltage range	160V ~ 450V	
Capacitance tolerance	±20% (20°C, 120Hz)	
Leakage current	$I \leq 0.01CV(\mu A)$ or 5mA (Whichever is smaller) (20°C, after 5 minutes) C=Nominal capacitance( $\mu F$ ), V=Rated voltage(V)	
Dissipation factor (20°C,120Hz)	Shall not exceed the values shown in the STANDARD RATINGS	
Load Life	After applying rated voltage with specified ripple current for 5000 hours at 105°C(the peak voltage shall not exceed the rated voltage), and then restored for 24 hours, capacitor shall meet the following requirement:	
	Capacitance change	Within ±20% of the initial value.
	Dissipation factor	Not more than 200% of the initial specified value.
Shelf Life	After storing for 500 hours at 105°C,UR to be applied for 30 minutes and then restored for 24 hours, capacitor shall meet the following requirement:	
	Capacitance change	Within ±20% of the initial value.
	Dissipation factor	Not more than 150% of the initial specified value.
Standard	JIS C 5101-4	

### ◆ Dimensions(Screw-mount)



ΦD	P	S	T	Cap material
36	12.7	M5×10	6.4	Epoxy Resin
51	22.0	M5×10	6.4	Epoxy Resin
64	28.6	M5×10	6.4	Epoxy Resin
77	32.0	M5×10	6.4	Epoxy Resin
90	32.0	M6×17	6.4	Epoxy Resin
101	41.5	M8×17	11.3	Epoxy Resin

### ◆ Dimensions(Screw-mount)

Frequency(Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.1	1.3	1.4

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10KHz (mΩ)	Part number
160 2C (200)	3300	51×100	0.25	7.6	35	35	UCGXA2C332YC100M
	3900	64×100	0.25	8.8	30	28	UCGXA2C392YD100M
	4700	64×100	0.25	9.5	25	25	UCGXA2C472YD100M
	5600	64×100	0.25	11.3	23	23	UCGXA2C562YD100M
	6800	77×100	0.25	12.7	20	22	UCGXA2C682YE100M
	8200	77×100	0.25	15.3	18	19	UCGXA2C822YE100M
	10000	77×115	0.25	16.7	15	16	UCGXA2C103YE115M
	12000	77×115	0.25	18.0	12	15	UCGXA2C123YE115M
	15000	77×130	0.25	19.3	11	12	UCGXA2C153YE130M
	18000	77×155	0.25	20.0	9	11	UCGXA2C183YE155M
	22000	90×130	0.25	21.4	8	8	UCGXA2C223YF130M
	27000	90×130	0.25	22.6	7	8	UCGXA2C273YF155M
	33000	90×130	0.25	24.5	6	7	UCGXA2C333YF130M
	39000	90×157	0.25	25.8	5	7	UCGXA2C393YF157M
200 2D (250)	2200	51×100	0.25	6.9	43	60	UCGXA2D222YC100M
	2700	51×100	0.25	7.7	31	39	UCGXA2D272YC100M
	3300	51×100	0.25	8.9	29	35	UCGXA2D332YC100M
	3900	64×100	0.25	9.4	26	30	UCGXA2D392YD100M
	4700	64×100	0.25	10.3	25	27	UCGXA2D472YD100M
	5600	64×100	0.25	11.0	23	25	UCGXA2D562YD100M
	6800	64×115	0.25	13.2	19	20	UCGXA2D682YD115M
	8200	77×100	0.25	14.2	15	18	UCGXA2D822YE100M
	10000	77×130	0.25	18.0	14	14	UCGXA2D103YE130M
	12000	77×155	0.25	18.5	12	14	UCGXA2D123YE155M
	15000	90×130	0.25	19.6	10	13	UCGXA2D153YF130M
	18000	90×130	0.25	27.5	8	12	UCGXA2D183YF130M
	22000	90×130	0.25	21.5	7	7	UCGXA2D223YF130M
	27000	90×157	0.25	25.8	6	7	UCGXA2D273YF157M
33000	90×157	0.25	32.3	5	7	UCGXA2D333YF157M	
250 2E (300)	1500	51×100	0.25	6.0	53	50	UCGXA2E152YC100M
	1800	51×100	0.25	7.2	46	44	UCGXA2E182YC100M
	2200	51×100	0.25	7.6	38	40	UCGXA2E222YC100M
	2700	51×100	0.25	8.4	33	36	UCGXA2E272YC100M
	3300	64×100	0.25	9.2	28	35	UCGXA2E332YD100M
	3900	64×100	0.25	11.0	25	30	UCGXA2E392YD100M
	4700	64×100	0.25	13.3	21	23	UCGXA2E472YD100M
	5600	77×100	0.25	14.9	19	21	UCGXA2E562YE100M
	6800	77×115	0.25	16.0	15	18	UCGXA2E682YE115M
	8200	77×130	0.25	17.1	13	16	UCGXA2E822YE130M
	10000	77×130	0.25	18.0	12	14	UCGXA2E103YE130M
	12000	90×130	0.25	18.8	10	11	UCGXA2E123YF130M
	15000	90×157	0.25	19.7	8	11	UCGXA2E153YF157M
	18000	90×157	0.25	21.1	7	10	UCGXA2E183YF157M
22000	90×157	0.25	22.8	6	8	UCGXA2E223YF157M	
350 2V (400)	560	51×80	0.20	3.6	194	222	UCGXA2V561YC080M
	680	51×80	0.20	4.4	156	197	UCGXA2V681YC080M
	820	51×100	0.20	5.0	130	174	UCGXA2V821YC100M
	1000	51×100	0.20	5.7	109	135	UCGXA2V102YC100M
	1200	64×100	0.20	6.3	90	120	UCGXA2V122YD100M
	1500	64×100	0.20	7.2	77	100	UCGXA2V152YD100M
	1800	64×115	0.20	7.7	62	80	UCGXA2V182YD115M
	2200	77×100	0.20	9.1	51	70	UCGXA2V222YE100M
	2700	77×100	0.20	10.8	41	58	UCGXA2V272YE100M
	3300	77×100	0.20	11.6	35	51	UCGXA2V332YE100M

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 85°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10KHz (mΩ)	Part number
350 2V (400)	3900	77×115	0.20	13.8	30	47	UCGXA2V392YE115M
	4700	77×130	0.20	15.2	28	40	UCGXA2V472YE130M
	5600	77×130	0.20	16.0	25	35	UCGXA2V562YE130M
	6800	77×130	0.20	17.5	20	29	UCGXA2V682YE130M
	8200	77×155	0.20	20.4	17	25	UCGXA2V822YE155M
	10000	77×155	0.20	23.4	15	23	UCGXA2V103YE155M
		90×157	0.20	23.4	15	23	UCGXA2V103YF157M
	12000	90×157	0.20	28.4	13	21	UCGXA2V123YF157M
	15000	90×196	0.20	34.4	10	20	UCGXA2V153YF196M
	18000	90×220	0.20	42.1	8	20	UCGXA2V183YF220M
22000	90×236	0.20	48.8	8	20	UCGXA2V223YF236M	
400 2G (450)	680	51×80	0.20	5.7	122	214	UCGXA2G681YC080M
	820	51×80	0.20	7.2	101	177	UCGXA2G821YC080M
	1000	51×80	0.20	8.4	85	150	UCGXA2G102YC080M
	1200	51×100	0.20	9.1	75	125	UCGXA2G122YC100M
	1500	51×100	0.20	9.7	62	108	UCGXA2G152YC100M
	1800	51×100	0.20	10.6	51	90	UCGXA2G182YC100M
	2200	64×100	0.20	12.2	39	75	UCGXA2G222YD100M
	2700	77×100	0.20	13.5	36	66	UCGXA2G272YE100M
	3300	77×115	0.20	15.1	35	53	UCGXA2G332YE115M
	3900	77×115	0.20	18.2	29	48	UCGXA2G392YE115M
	4700	77×115	0.20	20.3	26	41	UCGXA2G472YE115M
	5600	77×130	0.20	24.1	21	37	UCGXA2G562YE130M
	6800	77×155	0.20	27.8	18	30	UCGXA2G682YE155M
	8200	90×157	0.20	31.3	16	26	UCGXA2G822YF157M
	10000	90×157	0.20	35.1	13	23	UCGXA2G103YF157M
	12000	90×157	0.20	41.4	12	21	UCGXA2G123YF157M
15000	90×220	0.20	43.1	10	21	UCGXA2G153YF220M	
450 2W (500)	680	51×80	0.20	6.1	142	196	UCGXA2W681YC080M
	820	51×80	0.20	7.5	99	187	UCGXA2W681YC080M
	1000	51×80	0.20	8.8	84	154	UCGXA2W102YC080M
	1200	51×100	0.20	9.5	73	129	UCGXA2W122YC100M
	1500	51×115	0.20	10.1	60	108	UCGXA2W152YC115M
	1800	51×130	0.20	11.0	48	100	UCGXA2W182YC130M
	2200	64×115	0.20	12.6	35	84	UCGXA2W222YD115M
	2700	77×115	0.20	14.0	35	69	UCGXA2W272YE115M
	3300	77×130	0.20	15.6	32	61	UCGXA2W332YE130M
	3900	77×130	0.20	19.1	32	51	UCGXA2W392YE130M
	4700	77×155	0.20	21.7	26	43	UCGXA2W472YE155M
	5600	77×155	0.20	24.7	18	37	UCGXA2W562YE155M
	6800	90×157	0.20	27.5	16	33	UCGXA2W682YF157M
	8200	90×157	0.20	30.8	14	30	UCGXA2W822YF157M
	10000	90×196	0.20	33.8	12	25	UCGXA2W103YF196M
	12000	90×236	0.20	41.3	10	22	UCGXA2W123YF236M

- The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 10°C rise.
- When long life performance is required in actual use, the rms ripple current has to be reduced.