

UCGXL Series (105°C 10000H)

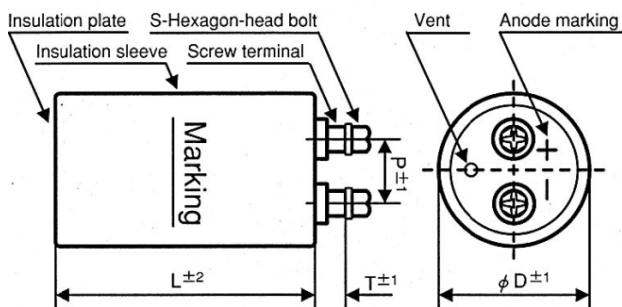
- Compliant to the RoHS directive
- High temperature & Extremely Long life design
- 105°C 10000H for Industrial Automation、Telecommunication Power Station、Medical Power Supply、Large Power Servo Driver...



◆ 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(μF), 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 10000 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	8.0	35	35	UCGXL2C332YC100M
	3900	64×100	0.25	9.3	30	28	UCGXL2C392YD100M
	4700	64×100	0.25	10.1	25	25	UCGXL2C472YD100M
	5600	64×100	0.25	12.0	23	23	UCGXL2C562YD100M
	6800	77×100	0.25	13.4	20	22	UCGXL2C682YE100M
	8200	77×100	0.25	16.2	18	19	UCGXL2C822YE100M
	10000	77×115	0.25	17.7	15	16	UCGXL2C103YE115M
	12000	77×115	0.25	19.0	12	15	UCGXL2C123YE115M
	15000	77×130	0.25	20.5	11	12	UCGXL2C153YE130M
	18000	77×155	0.25	21.1	9	11	UCGXL2C183YE155M
	22000	90×130	0.25	22.7	8	8	UCGXL2C223YF130M
	27000	90×130	0.25	23.9	7	8	UCGXL2C273YF155M
	33000	90×130	0.25	25.9	6	7	UCGXL2C333YF130M
	39000	90×157	0.25	27.3	5	7	UCGXL2C393YF157M
200 2D (250)	2200	51×100	0.25	7.3	43	60	UCGXL2D222YC100M
	2700	51×100	0.25	8.1	31	39	UCGXL2D272YC100M
	3300	51×100	0.25	9.5	29	35	UCGXL2D332YC100M
	3900	64×100	0.25	10.0	26	30	UCGXL2D392YD100M
	4700	64×100	0.25	10.9	25	27	UCGXL2D472YD100M
	5600	64×100	0.25	11.6	23	25	UCGXL2D562YD100M
	6800	64×115	0.25	14.0	19	20	UCGXL2D682YD115M
	8200	77×100	0.25	15.1	15	18	UCGXL2D822YE100M
	10000	77×130	0.25	19.0	14	14	UCGXL2D103YE130M
	12000	77×155	0.25	19.6	12	14	UCGXL2D123YE155M
	15000	90×130	0.25	20.8	10	13	UCGXL2D153YF130M
	18000	90×130	0.25	29.1	8	12	UCGXL2D183YF130M
	22000	90×130	0.25	22.8	7	7	UCGXL2D223YF130M
	27000	90×157	0.25	27.3	6	7	UCGXL2D273YF157M
33000	90×157	0.25	34.2	5	7	UCGXL2D333YF157M	
250 2E (300)	1500	51×100	0.25	6.4	53	50	UCGXL2E152YC100M
	1800	51×100	0.25	7.6	46	44	UCGXL2E182YC100M
	2200	51×100	0.25	8.0	38	40	UCGXL2E222YC100M
	2700	51×100	0.25	8.9	33	36	UCGXL2E272YC100M
	3300	64×100	0.25	9.8	28	35	UCGXL2E332YD100M
	3900	64×100	0.25	11.6	25	30	UCGXL2E392YD100M
	4700	64×100	0.25	14.1	21	23	UCGXL2E472YD100M
	5600	77×100	0.25	15.7	19	21	UCGXL2E562YE100M
	6800	77×115	0.25	16.9	15	18	UCGXL2E682YE115M
	8200	77×130	0.25	18.0	13	16	UCGXL2E822YE130M
	10000	77×130	0.25	19.0	12	14	UCGXL2E103YE130M
	12000	90×130	0.25	19.9	10	11	UCGXL2E123YF130M
	15000	90×157	0.25	20.8	8	11	UCGXL2E153YF157M
	18000	90×157	0.25	22.3	7	10	UCGXL2E183YF157M
22000	90×157	0.25	24.1	6	8	UCGXL2E223YF157M	
350 2V (400)	560	51×80	0.20	3.8	194	222	UCGXL2V561YC080M
	680	51×80	0.20	4.6	156	197	UCGXL2V681YC080M
	820	51×100	0.20	5.3	130	174	UCGXL2V821YC100M
	1000	51×100	0.20	6.0	109	135	UCGXL2V102YC100M
	1200	64×100	0.20	6.7	90	120	UCGXL2V122YD100M
	1500	64×100	0.20	7.6	77	100	UCGXL2V152YD100M
	1800	64×115	0.20	8.1	62	80	UCGXL2V182YD115M
	2200	77×100	0.20	9.7	51	70	UCGXL2V222YE100M
	2700	77×100	0.20	11.4	41	58	UCGXL2V272YE100M
	3300	77×100	0.20	12.3	35	51	UCGXL2V332YE100M

◆ 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	14.6	30	47	UCGXL2V392YE115M
	4700	77×130	0.20	16.1	28	40	UCGXL2V472YE130M
	5600	77×130	0.20	16.9	25	35	UCGXL2V562YE130M
	6800	77×130	0.20	18.5	20	29	UCGXL2V682YE130M
	8200	77×155	0.20	21.5	17	25	UCGXL2V822YE155M
	10000	77×155	0.20	24.7	15	23	UCGXL2V103YE155M
		90×157	0.20	24.7	15	23	UCGXL2V103YF157M
	12000	90×157	0.20	30.0	13	21	UCGXL2V123YF157M
	15000	90×196	0.20	36.4	10	20	UCGXL2V153YF196M
18000	90×220	0.20	44.5	8	20	UCGXL2V183YF220M	
22000	90×236	0.20	51.6	8	20	UCGXL2V223YF236M	
400 2G (450)	680	51×80	0.20	6.0	122	214	UCGXL2G681YC080M
	820	51×80	0.20	7.6	101	177	UCGXL2G821YC080M
	1000	51×80	0.20	8.9	85	150	UCGXL2G102YC080M
	1200	51×100	0.20	9.7	75	125	UCGXL2G122YC100M
	1500	51×100	0.20	10.2	62	108	UCGXL2G152YC100M
	1800	51×100	0.20	11.2	51	90	UCGXL2G182YC100M
	2200	64×100	0.20	12.9	39	75	UCGXL2G222YD100M
	2700	77×100	0.20	14.3	36	66	UCGXL2G272YE100M
	3300	77×115	0.20	15.9	35	53	UCGXL2G332YE115M
	3900	77×115	0.20	19.2	29	48	UCGXL2G392YE115M
	4700	77×115	0.20	21.4	26	41	UCGXL2G472YE115M
	5600	77×130	0.20	25.5	21	37	UCGXL2G562YE130M
	6800	77×155	0.20	29.4	18	30	UCGXL2G682YE155M
	8200	90×157	0.20	33.1	16	26	UCGXL2G822YF157M
	10000	90×157	0.20	37.1	13	23	UCGXL2G103YF157M
12000	90×157	0.20	43.8	12	21	UCGXL2G123YF157M	
15000	90×220	0.20	45.6	10	21	UCGXL2G153YF220M	
450 2W (500)	680	51×80	0.20	6.5	142	196	UCGXL2W681YC080M
	820	51×80	0.20	7.9	99	187	UCGXL2W681YC080M
	1000	51×80	0.20	9.3	84	154	UCGXL2W102YC080M
	1200	51×100	0.20	10.0	73	129	UCGXL2W122YC100M
	1500	51×115	0.20	10.7	60	108	UCGXL2W152YC115M
	1800	51×130	0.20	11.6	48	100	UCGXL2W182YC130M
	2200	64×115	0.20	13.3	35	84	UCGXL2W222YD115M
	2700	77×115	0.20	14.8	35	69	UCGXL2W272YE115M
	3300	77×130	0.20	16.5	32	61	UCGXL2W332YE130M
	3900	77×130	0.20	20.2	32	51	UCGXL2W392YE130M
	4700	77×155	0.20	23.0	26	43	UCGXL2W472YE155M
	5600	77×155	0.20	26.2	18	37	UCGXL2W562YE155M
	6800	90×157	0.20	29.1	16	33	UCGXL2W682YF157M
	8200	90×157	0.20	32.5	14	30	UCGXL2W822YF157M
	10000	90×196	0.20	35.7	12	25	UCGXL2W103YF196M
12000	90×236	0.20	43.7	10	22	UCGXL2W123YF236M	

- 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.