

UGF5A Series (85°C 2000H)

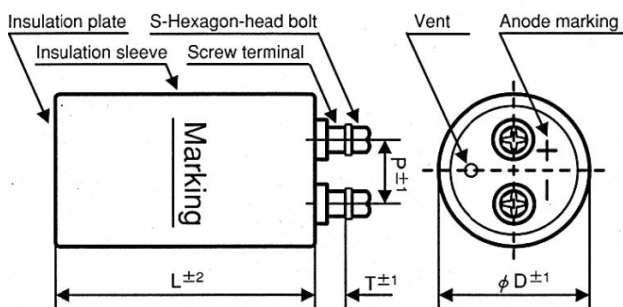
- Compliant to the RoHS directive
- Heavy Duty with Screw terminals
- 85°C 2000H for Industrial Automation、Telecommunication Power Station、Medical Power Supply、Large Power Servo Driver...



◆ Specification

Item	Performance Characteristics	
Operating range	-25°C ~ +85°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 2000 hours at 85°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 85°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 85°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10KHz (mΩ)	Part number
160 2C (200)	3300	51×80	0.25	9.2	35	35	UGF5A2C332YC080M
	3900	51×80	0.25	10.5	30	28	UGF5A2C392YC080M
	4700	51×100	0.25	12.8	25	25	UGF5A2C472YC100M
	5600	51×100	0.25	13.2	23	23	UGF5A2C562YC100M
	6800	64×100	0.25	14.0	20	22	UGF5A2C682YD100M
	8200	64×100	0.25	17.0	18	19	UGF5A2C822YD100M
	10000	64×100	0.25	20.9	15	16	UGF5A2C103YD100M
	12000	64×130	0.25	21.2	12	15	UGF5A2C123YD130M
	15000	64×130	0.25	22.6	11	12	UGF5A2C153YD130M
		77×100	0.25	22.6	11	12	UGF5A2C153YE100M
	18000	77×115	0.25	25.2	9	11	UGF5A2C183YE115M
	22000	77×130	0.25	28.5	8	8	UGF5A2C223YE130M
	27000	77×155	0.25	32.7	7	8	UGF5A2C273YE155M
	33000	90×130	0.25	36.8	6	7	UGF5A2C333YF130M
39000	90×157	0.25	45.2	5	7	UGF5A2C393YF157M	
200 2D (250)	2200	51×80	0.25	8.4	43	60	UGF5A2D222YC080M
	2700	51×80	0.25	9.8	31	39	UGF5A2D272YC080M
	3300	51×80	0.25	11.2	29	35	UGF5A2D332YC080M
	3900	51×100	0.25	11.7	26	30	UGF5A2D392YC100M
	4700	51×100	0.25	12.1	25	27	UGF5A2D472YC100M
	5600	64×100	0.25	13.0	23	25	UGF5A2D562YD100M
	6800	64×100	0.25	15.5	19	20	UGF5A2D682YD100M
	8200	77×100	0.25	16.0	15	18	UGF5A2D822YE100M
	10000	77×100	0.25	20.1	14	14	UGF5A2D103YE100M
	12000	77×115	0.25	21.8	12	14	UGF5A2D123YE115M
	15000	77×115	0.25	23.2	10	13	UGF5A2D153YE115M
	18000	77×130	0.25	26.5	8	12	UGF5A2D183YE130M
	22000	77×143	0.25	31.2	7	7	UGF5A2D223YE143M
	27000	90×130	0.25	34.3	6	7	UGF5A2D273YF130M
33000	90×157	0.25	39.0	5	7	UGF5A2D333YF157M	
250 2E (300)	1500	51×80	0.25	5.5	53	50	UGF5A2E152YC080M
	1800	51×80	0.25	6.9	46	44	UGF5A2E182YC080M
	2200	51×100	0.25	8.1	38	40	UGF5A2E222YC100M
	2700	51×100	0.25	10.7	33	36	UGF5A2E272YC100M
	3300	51×100	0.25	11.9	28	35	UGF5A2E332YC100M
	3900	64×100	0.25	13.1	25	30	UGF5A2E392YD100M
	4700	64×100	0.25	14.3	21	23	UGF5A2E472YD100M
	5600	64×100	0.25	14.9	19	21	UGF5A2E562YD100M
	6800	64×115	0.25	15.9	15	18	UGF5A2E682YD115M
	8200	64×115	0.25	17.3	13	16	UGF5A2E822YD115M
	10000	64×130	0.25	21.3	12	14	UGF5A2E103YD130M
		77×130	0.25	21.3	12	14	UGF5A2E103YE130M
	12000	77×115	0.25	22.4	10	11	UGF5A2E123YE115M
	15000	77×130	0.25	23.7	8	11	UGF5A2E153YE130M
18000	77×155	0.25	30.3	7	10	UGF5A2E183YE155M	
22000	90×157	0.25	36.9	6	8	UGF5A2E223YF157M	
350 2V (400)	560	36×80	0.20	3.9	194	222	UGF5A2V561YA080M
	680	36×80	0.20	4.4	156	197	UGF5A2V681YA080M
	820	36×80	0.20	5.2	130	174	UGF5A2V821YA080M
	1000	51×80	0.20	6.0	109	135	UGF5A2V102YC080M
	1200	51×75	0.20	7.1	90	120	UGF5A2V122YC080M
	1500	51×80	0.20	8.0	77	100	UGF5A2V152YC080M
	1800	51×100	0.20	9.5	62	80	UGF5A2V182YC100M
	2200	51×100	0.20	10.3	51	70	UGF5A2V222YC100M
	2700	64×100	0.20	12.2	41	58	UGF5A2V272YD100M
	3300	64×100	0.20	13.8	35	51	UGF5A2V332YD100M

◆ 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	64×100	0.20	16.7	30	47	UGF5A2V392YD100M
	4700	64×115	0.20	18.9	28	40	UGF5A2V472YD115M
	5600	77×115	0.20	20.5	25	35	UGF5A2V562YE115M
	6800	77×130	0.20	21.1	20	29	UGF5A2V682YE130M
	8200	77×155	0.20	22.8	17	25	UGF5A2V822YE155M
	10000	77×155	0.20	28.1	15	23	UGF5A2V103YE155M
		90×157	0.20	28.1	15	23	UGF5A2V103YF157M
	12000	90×157	0.20	30.3	13	21	UGF5A2V123YF157M
	15000	90×196	0.20	36.2	10	20	UGF5A2V153YF196M
18000	90×220	0.20	37.5	8	20	UGF5A2V183YF220M	
22000	90×236	0.20	39.8	8	20	UGF5A2V223YF236M	
400 2G (450)	680	51×80	0.20	5.6	122	214	UGF5A2G681YC080M
	820	36×100	0.20	6.1	101	177	UGF5A2G821YC080M
	1000	51×80	0.20	6.9	85	150	UGF5A2G102YC080M
	1200	51×80	0.20	7.4	75	125	UGF5A2G122YC080M
	1500	51×100	0.20	8.6	62	108	UGF5A2G152YC100M
	1800	51×100	0.20	9.8	51	90	UGF5A2G182YC100M
	2200	64×100	0.20	11.6	39	75	UGF5A2G222YD100M
	2700	64×100	0.20	13.3	36	66	UGF5A2G272YD100M
	3300	64×115	0.20	15.4	35	53	UGF5A2G332YD115M
	3900	64×130	0.20	16.8	29	48	UGF5A2G392YD130M
	4700	77×115	0.20	18.2	26	41	UGF5A2G472YE115M
	5600	77×130	0.20	20.8	21	37	UGF5A2G562YE130M
	6800	77×155	0.20	21.7	18	30	UGF5A2G682YE155M
	8200	90×157	0.20	25.9	16	26	UGF5A2G822YF157M
	10000	90×157	0.20	28.7	13	23	UGF5A2G103YF157M
12000	90×157	0.20	32.3	12	21	UGF5A2G123YF157M	
15000	90×220	0.20	36.8	10	21	UGF5A2G153YF220M	
450 2W (500)	680	51×80	0.20	5.5	142	196	UGF5A2W681YC080M
	820	51×80	0.20	6.2	99	187	UGF5A2W821YC080M
	1000	51×80	0.20	7.1	84	154	UGF5A2W102YC080M
	1200	51×100	0.20	7.9	73	129	UGF5A2W122YC100M
	1500	51×115	0.20	8.8	60	108	UGF5A2W152YC115M
	1800	51×130	0.20	11.6	48	100	UGF5A2W182YC130M
	2200	64×100	0.20	13.5	35	84	UGF5A2W222YD100M
	2700	64×115	0.20	13.8	35	69	UGF5A2W272YD115M
	3300	64×130	0.20	14.2	32	61	UGF5A2W332YD130M
	3900	77×115	0.20	15.9	32	51	UGF5A2W392YE115M
	4700	77×130	0.20	18.1	26	43	UGF5A2W472YE130M
	5600	77×155	0.20	20.2	18	37	UGF5A2W562YE155M
	6800	90×157	0.20	23.9	16	33	UGF5A2W682YF157M
	8200	90×157	0.20	25.3	14	30	UGF5A2W822YF157M
	10000	90×196	0.20	30.0	12	25	UGF5A2W103YF196M
12000	90×236	0.20	32.9	10	22	UGF5A2W123YF236M	

- 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.