

# UHL Series (105°C 8000H)

- Compliant to the RoHS directive
- High ripple current & Long life design
- For Home Appliance, Audio Amplifier, Frequency inverter, Vehicle Power Supply Module, Smart Meters, Medical Power Supply...



## ◆ SPECIFICATIONS

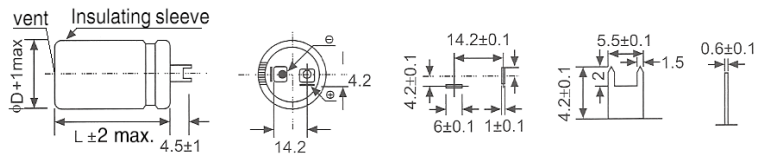
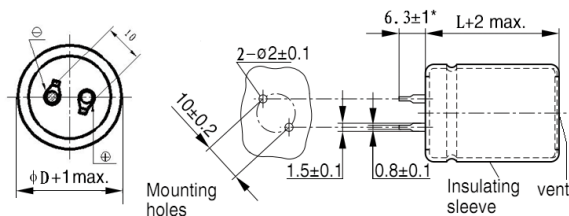
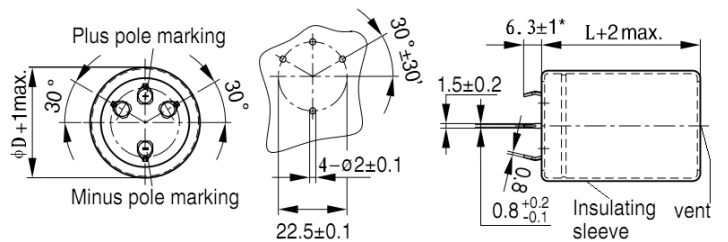
Item	Performance Characteristics							
Operating range	-40°C~+105°C				-25°C~+105°C			
Rated voltage range	10V~100V				160V~450V			
Capacitance tolerance	±20% (20°C, 120Hz)							
Leakage current	I≤0.01CV(µA) or 1.5mA (Whichever is smaller) (20°C, after 5 minutes) C=Nominal capacitance(µF), V=Rated voltage(V)							
Dissipation factor (20°C, 120Hz)	UR(V)	10	16	25	35	50	63 ~ 400	450
	tanδ	0.50	0.40	0.30	0.25	0.20	0.15	0.20
Stability at Low Temperature (Impedance ratio at 120Hz)	UR(V)	10 ~ 16	25	35	50~63	80~100	160~250	315~450
	Z(-25°C)/Z(+20°C)	4	3	3	2		4	8
	Z(-40°C)/Z(+20°C)	15	10	8	6	5	-	
Load Life	After applying rated voltage with specified ripple current for 8000 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.						
	Leakage current	Not more than the initial specified value.						
Shelf Life	After storing for 1000 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 ±15% of the initial value.						
	Dissipation factor	Not more than 150% of the initial specified value.						
	Leakage current	Not more than the initial specified value.						
Standard	JIS C 5101-4							

## ◆ Coefficient of rated ripple current

UR(V) \ F (Hz)	50(60)	120	1K	10K	100K
≤50	0.95	1.00	1.05	1.08	1.08
63-100	0.92	1.00	1.13	1.19	1.20
160-250	0.81	1.00	1.32	1.45	1.50
315-500	0.77	1.00	1.30	1.41	1.43

## ◆ Drawing

Unit:mm



◆ Shorter terminal is: 4.0±0.5mm

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number
10 1A (16)	12000	22×30	0.50	2.09	50	40	UHL1A123KP030M
	15000	25×25	0.50	2.32	40	30	UHL1A153KQ025M
	18000	25×30	0.50	2.63	32	26	UHL1A183KQ030M
	22000	25×35	0.50	3.01	25	20	UHL1A223KQ035M
	33000	30×30	0.50	3.89	18	13	UHL1A333KR030M
	39000	30×35	0.50	4.35	15	11	UHL1A393KR035M
	47000	35×40	0.50	4.44	12	9.1	UHL1A473KR040M
	68000	35×50	0.50	6.49	8	6.3	UHL1A683KS040M
	82000	35×50	0.50	7.93	7	5.2	UHL1A823KS045M
16 1C (25)	6800	22*25	0.40	1.92	100	70	UHL1C682KP025M
	10000	22*30	0.40	2.36	70	50	UHL1C103KP030M
		25*25	0.40	2.36	70	50	UHL1C103KQ025M
	12000	22*35	0.40	2.89	60	40	UHL1C123KP035M
		25*30	0.40	2.89	60	40	UHL1C123KQ030M
		30*25	0.40	2.89	60	40	UHL1C123KR025M
	15000	22*40	0.40	3.19	45	35	UHL1C153KP040M
		25*35	0.40	3.19	45	35	UHL1C153KQ035M
	18000	22*45	0.40	3.66	40	30	UHL1C183KP045M
		25*40	0.40	3.66	40	30	UHL1C183KQ040M
		30*30	0.40	3.66	40	30	UHL1C183KR030M
		35*25	0.40	3.66	40	30	UHL1C183KS025M
	22000	25*45	0.40	4.02	30	22	UHL1C223KQ045M
		30*35	0.40	4.02	30	22	UHL1C223KR035M
	27000	25*50	0.40	4.52	25	20	UHL1C273KQ050M
		30*40	0.40	4.52	25	20	UHL1C273KR040M
		35*30	0.40	4.52	25	20	UHL1C273KS030M
	33000	30*45	0.40	5.09	20	15	UHL1C333KR045M
		35*35	0.40	5.09	20	15	UHL1C333KS035M
	39000	30*50	0.40	5.68	20	15	UHL1C393KR050M
35*40		0.40	5.68	20	15	UHL1C393KS040M	
47000	35*45	0.40	6.41	15	12	UHL1C473KS045M	
25 1E (35)	4700	22*25	0.30	1.89	120	80	UHL1E472KP025M
	6800	22*30	0.30	2.30	80	55	UHL1E682KP030M
		25*25	0.30	2.30	80	55	UHL1E682KQ025M
	8200	22*35	0.30	2.71	65	45	UHL1E822KP035M
		25*30	0.30	2.71	65	45	UHL1E822KQ030M
		30*25	0.30	2.71	65	45	UHL1E822KR025M
	10000	22*40	0.30	2.95	55	40	UHL1E103KP040M
		25*35	0.30	2.95	55	40	UHL1E103KQ035M
	12000	25*40	0.30	2.32	45	35	UHL1E123KQ040M
		30*30	0.30	2.32	45	35	UHL1E123KR030M
		35*25	0.30	2.32	45	35	UHL1E123KS025M
	15000	25*45	0.30	2.82	35	25	UHL1E153KQ045M
		30*35	0.30	2.82	35	25	UHL1E153KR035M
		35*30	0.30	2.82	35	25	UHL1E153KS030M
	18000	25*50	0.30	4.20	30	22	UHL1E183KQ050M
		30*40	0.30	4.20	30	22	UHL1E183KR040M
	22000	30*45	0.30	5.05	25	20	UHL1E223KR045M
		35*35	0.30	5.05	25	20	UHL1E223KS035M
27000	35*45	0.30	5.66	20	15	UHL1E273KS045M	
33000	35*50	0.30	6.37	20	12	UHL1E333KS050M	
35 1V (50)	3300	22*25	0.25	1.71	150	100	UHL1V332KP025M
	4700	25*25	0.25	2.21	100	70	UHL1V472KQ025M
		22*40	0.25	2.74	70	50	UHL1V682KP040M
	6800	25*35	0.25	2.74	70	50	UHL1V682KQ035M

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number	
35 1V (50)	10000	25*45	0.25	3.47	50	35	UHL1V103KQ045M	
		30*35	0.25	3.47	50	35	UHL1V103KR035M	
	12000	25*50	0.25	4.09	40	30	UHL1V123KQ050M	
		35*30	0.25	4.09	40	30	UHL1V123KS030M	
	15000	30*45	0.25	4.43	35	25	UHL1V153KR045M	
		35*35	0.25	4.43	35	25	UHL1V153KS035M	
	18000	35*40	0.25	4.93	30	20	UHL1V183KS040M	
	22000	35*50	0.25	5.83	25	16	UHL1V223KS050M	
	50 1H (63)	1800	22*25	0.20	1.57	225	160	UHL1H182KP025M
		2200	22*30	0.20	1.72	185	130	UHL1H222KP030M
2700		25*25	0.20	2.03	150	110	UHL1H272KQ025M	
3300		22*35	0.20	2.28	125	90	UHL1H332KP035M	
		25*30	0.20	2.28	125	90	UHL1H332KQ030M	
3900		25*35	0.20	2.71	110	75	UHL1H392KQ035M	
		30*25	0.20	2.71	110	75	UHL1H392KR025M	
4700		30*30	0.20	3.16	90	60	UHL1H472KR030M	
		35*25	0.20	3.16	90	60	UHL1H472KS025M	
5600		22*50	0.20	3.49	80	50	UHL1H562KP050M	
		25*40	0.20	3.49	80	50	UHL1H562KQ040M	
		30*35	0.20	3.49	80	50	UHL1H562KR035M	
6800		30*40	0.20	4.01	60	45	UHL1H682KR040M	
		35*30	0.20	4.01	60	45	UHL1H682KS030M	
8200		30*45	0.20	4.39	50	35	UHL1H822KR045M	
		35*35	0.20	4.39	50	35	UHL1H822KS035M	
10000		30*50	0.20	4.84	42	30	UHL1H103KR050M	
		35*40	0.20	4.84	42	30	UHL1H103KS040M	
12000		35*45	0.20	5.4	35	25	UHL1H123KS045M	
63 1J (80)		1200	22*25	0.15	1.50	225	160	UHL1J122KP025M
	1800	22*30	0.15	1.81	150	110	UHL1J182KP030M	
		25*25	0.15	1.81	150	110	UHL1J182KQ025M	
	2200	22*35	0.15	2.05	125	90	UHL1J222KP035M	
		25*30	0.15	2.05	125	90	UHL1J222KQ030M	
	2700	22*40	0.15	2.36	100	70	UHL1J272KP040M	
		25*35	0.15	2.36	100	70	UHL1J272KQ035M	
		30*25	0.15	2.36	100	70	UHL1J272KR025M	
	3300	25*40	0.15	2.86	80	60	UHL1J332KQ040M	
		30*30	0.15	2.86	80	60	UHL1J332KR030M	
		35*25	0.15	2.86	80	60	UHL1J332KS025M	
	3900	25*45	0.15	3.01	70	50	UHL1J392KQ045M	
		30*35	0.15	3.01	70	50	UHL1J392KR035M	
	4700	25*50	0.15	3.42	60	40	UHL1J472KQ050M	
		30*40	0.15	3.42	60	40	UHL1J472KR040M	
		35*30	0.15	3.42	60	40	UHL1J472KS030M	
	5600	30*45	0.15	3.88	50	35	UHL1J562KR045M	
		35*35	0.15	3.88	50	35	UHL1J562KS035M	
	6800	30*50	0.15	4.41	40	30	UHL1J682KR050M	
		35*40	0.15	4.41	40	30	UHL1J682KS040M	
8200	35*45	0.15	4.93	35	25	UHL1J822KS045M		
10000	35*50	0.15	5.55	30	20	UHL1J103KS050M		
80 1K (100)	1000	22*25	0.15	1.48	270	190	UHL1K102KP025M	
	1200	22*30	0.15	1.65	230	160	UHL1K122KP030M	
		25*25	0.15	1.65	230	160	UHL1K122KQ025M	
	1500	22*35	0.15	1.92	180	130	UHL1K152KP035M	
		25*30	0.15	1.92	180	130	UHL1K152KQ030M	
	1800	22*40	0.15	2.17	150	110	UHL1K182KP040M	
		30*25	0.15	2.17	150	110	UHL1K182KR025M	

**◆ STANDARD RATING**

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number
80 1K (100)	2200	25*35	0.15	2.57	125	90	UHL1K222KQ035M
		30*30	0.15	2.57	125	90	UHL1K222KR030M
		35*25	0.15	2.57	125	90	UHL1K222KS025M
	2700	25*45	0.15	2.88	100	70	UHL1K272KQ045M
		30*35	0.15	2.88	100	70	UHL1K272KR035M
	3300	25*50	0.15	3.29	80	60	UHL1K332KQ050M
		30*40	0.15	3.29	80	60	UHL1K332KR040M
		35*30	0.15	3.29	80	60	UHL1K332KS030M
	3900	30*45	0.15	3.68	70	50	UHL1K392KR045M
		35*35	0.15	3.68	70	50	UHL1K392KS035M
	4700	30*50	0.15	4.21	60	40	UHL1K472KR050M
		35*40	0.15	4.21	60	40	UHL1K472KS040M
5600	35*45	0.15	4.58	50	35	UHL1K562KS045M	
6800	35*50	0.15	4.96	40	30	UHL1K682KS050M	
100 2A (125)	560	22*25	0.15	1.27	480	340	UHL2A561KP025M
	820	22*30	0.15	1.60	330	230	UHL2A821KP030M
		25*25	0.15	1.60	330	230	UHL2A821KQ025M
	1000	22*35	0.15	1.84	270	190	UHL2A102KP035M
		25*30	0.15	1.84	270	190	UHL2A102KQ030M
	1200	22*40	0.15	2.08	230	160	UHL2A122KP040M
		25*35	0.15	2.08	230	160	UHL2A122KQ035M
		30*25	0.15	2.08	230	160	UHL2A122KR025M
	1500	25*40	0.15	2.45	180	130	UHL2A152KQ040M
		30*30	0.15	2.45	180	130	UHL2A152KR030M
		35*25	0.15	2.45	180	130	UHL2A152KS025M
	1800	25*45	0.15	2.70	150	110	UHL2A182KQ045M
		30*35	0.15	2.70	150	110	UHL2A182KR035M
		25*50	0.15	3.19	125	85	UHL2A222KQ050M
	2200	30*40	0.15	3.19	125	85	UHL2A222KR040M
		35*30	0.15	3.19	125	85	UHL2A222KS030M
		30*45	0.15	3.48	100	70	UHL2A272KR045M
	2700	35*35	0.15	3.48	100	70	UHL2A272KS035M
		30*50	0.15	3.93	80	60	UHL2A332KR050M
	3300	35*40	0.15	3.93	80	60	UHL2A332KS040M
		35*45	0.15	4.37	70	50	UHL2A392KS045M
4700	35*50	0.15	4.91	60	40	UHL2A472KS050M	
160 2C (200)	330	22*25	0.15	1.48	610	430	UHL2C331KP025M
	390	22*30	0.15	1.71	510	360	UHL2C391KP030M
	470	22*35	0.15	1.83	430	300	UHL2C471KP035M
		25*25	0.15	1.83	430	300	UHL2C471KQ025M
	560	22*40	0.15	2.05	355	250	UHL2C561KP040M
		25*30	0.15	2.05	355	250	UHL2C561KQ030M
	680	22*45	0.15	2.24	300	210	UHL2C681KP045M
		25*35	0.15	2.24	300	210	UHL2C681KQ035M
		30*25	0.15	2.24	300	210	UHL2C681KR025M
	820	25*40	0.15	2.48	245	170	UHL2C821KQ040M
		30*30	0.15	2.48	245	170	UHL2C821KR030M
	1000	25*45	0.15	2.95	200	140	UHL2C102KQ045M
		30*35	0.15	2.95	200	140	UHL2C102KR035M
	1200	25*50	0.15	3.48	170	120	UHL2C122KQ050M
		30*40	0.15	3.48	170	120	UHL2C122KR040M
		35*30	0.15	3.48	170	120	UHL2C122KS030M
	1500	30*45	0.15	3.78	135	95	UHL2C152KR045M
		35*35	0.15	3.78	135	95	UHL2C152KS035M
	1800	35*45	0.15	4.27	120	80	UHL2C182KS045M
	2200	35*50	0.15	4.80	100	70	UHL2C222KS050M

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number
200 2D (250)	220	22*25	0.15	1.48	910	640	UHL2D221KP025M
	270	22*30	0.15	1.71	740	520	UHL2D271KP030M
	330	25*25	0.15	1.83	610	430	UHL2D331KQ025M
	390	22*35	0.15	1.83	510	360	UHL2D391KP035M
	470	22*40	0.15	2.05	425	300	UHL2D471KP040M
		25*30	0.15	2.05	425	300	UHL2D471KQ030M
		30*25	0.15	2.05	425	300	UHL2D471KR025M
	560	22*45	0.15	2.24	355	250	UHL2D561KP045M
		25*35	0.15	2.24	355	250	UHL2D561KQ035M
	680	22*50	0.15	2.48	300	210	UHL2D681KP050M
		25*40	0.15	2.48	300	210	UHL2D681KQ040M
		30*30	0.15	2.48	300	210	UHL2D681KR030M
	820	25*50	0.15	2.95	245	170	UHL2D821KQ050M
		30*35	0.15	2.95	245	170	UHL2D821KR035M
		35*30	0.15	3.48	245	170	UHL2D821KS030M
	1000	30*45	0.15	3.48	200	140	UHL2D102KR045M
		35*35	0.15	3.48	200	140	UHL2D102KS035M
	1200	30*50	0.15	3.78	170	120	UHL2D122KR050M
35*40		0.15	3.78	170	120	UHL2D122KS040M	
1500	35*45	0.15	4.27	140	100	UHL2D152KS045M	
1800	35*50	0.15	4.80	120	80	UHL2D182KS050M	
250 2E (300)	180	22*25	0.15	1.11	1110	780	UHL2E181KP025M
	220	22*30	0.15	1.31	910	640	UHL2E221KP030M
		25*25	0.15	1.31	910	640	UHL2E221KQ025M
	270	22*35	0.15	1.36	740	520	UHL2E271KP035M
	330	22*40	0.15	1.55	610	430	UHL2E331KP040M
		25*30	0.15	1.55	610	430	UHL2E331KQ030M
		30*25	0.15	1.55	610	430	UHL2E331KR025M
	390	22*45	0.15	1.77	510	360	UHL2E391KP045M
		25*35	0.15	1.77	510	360	UHL2E391KQ035M
	470	25*40	0.15	1.90	430	300	UHL2E471KQ040M
		30*30	0.15	1.90	430	300	UHL2E471KR030M
		35*25	0.15	1.90	430	300	UHL2E471KS025M
	560	25*45	0.15	2.21	360	250	UHL2E561KQ045M
		30*35	0.15	2.21	360	250	UHL2E561KR035M
		35*30	0.15	2.21	360	250	UHL2E561KS030M
	680	25*50	0.15	2.63	300	210	UHL2E681KQ050M
		30*40	0.15	2.63	300	210	UHL2E681KR040M
	820	30*45	0.15	2.77	245	170	UHL2E821KR045M
35*35		0.15	2.77	245	170	UHL2E821KS035M	
1000	30*50	0.15	3.19	200	140	UHL2E102KR050M	
	35*40	0.15	3.19	200	140	UHL2E102KS040M	
1200	35*45	0.15	3.60	170	120	UHL2E122KS045M	
1500	35*50	0.15	4.22	170	120	UHL2E152KS050M	
315 2F (365)	100	22*25	0.15	0.83	2000	1600	UHL2F101KP025M
	120	22*25	0.15	0.93	2000	1600	UHL2F121KP025M
	150	22*30	0.15	1.00	1330	1100	UHL2F151KP030M
		25*25	0.15	1.00	1330	1100	UHL2F151KQ025M
	180	22*35	0.15	1.12	1110	890	UHL2F181KP035M
		25*30	0.15	1.12	1110	890	UHL2F181KQ030M
	220	22*40	0.15	1.36	910	730	UHL2F221KP040M
		25*35	0.15	1.36	910	730	UHL2F221KQ035M
	270	22*45	0.15	1.56	740	600	UHL2F271KP045M
		25*40	0.15	1.56	740	600	UHL2F271KQ040M
30*30		0.15	1.56	740	600	UHL2F271KR030M	
		35*25	0.15	1.56	740	600	UHL2F271KS025M

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number
315 2F (365)	330	25*45	0.15	1.69	610	490	UHL2F331KQ045M
		30*35	0.15	1.69	610	490	UHL2F331KR035M
	390	30*40	0.15	1.89	520	410	UHL2F391KR040M
		35*30	0.15	1.89	520	410	UHL2F391KS030M
	470	30*45	0.15	2.15	430	345	UHL2F471KR045M
		35*35	0.15	2.15	430	345	UHL2F471KS035M
	560	30*50	0.15	2.40	360	290	UHL2F561KR050M
		35*40	0.15	2.40	360	290	UHL2F561KS040M
	680	35*45	0.15	2.77	300	240	UHL2F681KS045M
	350 2V (400)	82	22*30	0.15	0.71	2940	1620
100		25*25	0.15	0.83	1995	1100	UHL2V101KQ025M
120		22*35	0.15	0.92	1660	920	UHL2V121KP035M
150		22*40	0.15	1.00	1330	730	UHL2V151KP040M
180		22*45	0.15	1.12	1110	610	UHL2V181KP045M
		25*35	0.15	1.12	1110	610	UHL2V181KQ035M
		30*30	0.15	1.12	1110	610	UHL2V181KR030M
220		22*50	0.15	1.24	910	500	UHL2V221KP050M
		25*40	0.15	1.24	910	500	UHL2V221KQ040M
270		25*50	0.15	1.48	740	410	UHL2V271KQ050M
		30*35	0.15	1.48	740	410	UHL2V271KR035M
		35*30	0.15	1.48	740	410	UHL2V271KS030M
330		30*45	0.15	1.71	610	340	UHL2V331KR045M
		35*35	0.15	1.71	610	340	UHL2V331KS035M
390		30*50	0.15	1.90	510	285	UHL2V391KR050M
		35*40	0.15	1.90	510	285	UHL2V391KS040M
470	35*45	0.15	2.18	425	240	UHL2V471KS045M	
560	35*50	0.15	2.45	355	200	UHL2V561KS050M	
400 2G (450)	68	22*25	0.15	0.59	2930	1525	UHL2G680KP025M
	82	25*25	0.15	0.77	2430	1265	UHL2G820KQ025M
	100	22*30	0.15	0.94	2000	1035	UHL2G101KP030M
	120	22*35	0.15	1.04	1660	865	UHL2G121KP035M
		25*30	0.15	1.04	1660	865	UHL2G121KQ030M
		30*25	0.15	1.04	1660	865	UHL2G121KR025M
	150	22*40	0.15	1.12	1330	690	UHL2G151KP040M
		25*35	0.15	1.12	1330	690	UHL2G151KQ035M
	180	25*40	0.15	1.24	1110	575	UHL2G181KQ040M
		30*30	0.15	1.24	1110	575	UHL2G181KR030M
		35*25	0.15	1.24	1110	575	UHL2G181KS025M
	220	25*45	0.15	1.36	910	475	UHL2G221KQ045M
		30*35	0.15	1.36	910	475	UHL2G221KR035M
	270	25*50	0.15	1.53	740	385	UHL2G271KQ050M
		30*40	0.15	1.53	740	385	UHL2G271KR040M
		35*30	0.15	1.53	740	385	UHL2G271KS030M
	330	30*45	0.15	1.73	610	315	UHL2G331KR045M
		35*35	0.15	1.73	610	315	UHL2G331KS035M
	390	30*50	0.15	1.95	510	265	UHL2G391KR050M
35*40		0.15	1.95	510	265	UHL2G391KS040M	
470	35*45	0.15	2.24	425	220	UHL2G471KS045M	
560	35*50	0.15	2.54	355	185	UHL2G561KS050M	
680	35*60	0.15	2.71	305	165	UHL2G681KS060M	
450 2W (500)	56	22*30	0.20	0.68	4740	2370	UHL2W560KP030M
	68	22*30	0.20	0.78	3910	1960	UHL2W680KP030M
		25*25	0.20	0.78	3910	1960	UHL2W680KQ025M
	82	22*35	0.20	1.00	3240	1620	UHL2W820KP035M
		25*30	0.20	1.00	3240	1620	UHL2W820KQ030M

## ◆ STANDARD RATING

Rated Voltage code (V.DC)	Capacitance (μF)	Case size ΦD×L(mm)	tanδ 20°C, 120Hz	Ripple current 105°C, 120Hz (Arms)	Max ESR 20°C, 120Hz(mΩ)	ESR(typ.) 20°C, 120Hz(mΩ)	Part number
450 2W (500)	100	22*40	0.20	1.24	2655	1330	UHL2W101KP040M
		25*30	0.20	1.24	2655	1330	UHL2W101KQ030M
		30*25	0.20	1.24	2655	1330	UHL2W101KR025M
	120	22*45	0.20	1.33	2215	1110	UHL2W121KP045M
		25*35	0.20	1.33	2215	1110	UHL2W121KQ035M
	150	25*40	0.20	1.55	1770	885	UHL2W151KQ040M
		30*30	0.20	1.55	1770	885	UHL2W151KR030M
		35*25	0.20	1.55	1770	885	UHL2W151KS025M
	180	25*45	0.20	1.89	1475	740	UHL2W181KQ045M
		30*35	0.20	1.89	1475	740	UHL2W181KR035M
	220	25*50	0.20	2.07	1210	610	UHL2W221KQ050M
		30*40	0.20	2.07	1210	610	UHL2W221KR040M
		35*30	0.20	2.07	1210	610	UHL2W221KS030M
	270	30*45	0.20	2.24	990	500	UHL2W271KR045M
		35*35	0.20	2.24	990	500	UHL2W271KS035M
	330	30*50	0.20	2.60	810	410	UHL2W331KR050M
		35*40	0.20	2.60	810	410	UHL2W331KS040M
	390	35*45	0.20	2.93	685	340	UHL2W391KS045M
470	35*50	0.20	3.26	565	290	UHL2W471KS050M	
560	35*50	0.20	3.42	360	320	UHL2W561KS050M	

- 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.