

Aluminum Electrolytic Capacitors

Radial Standard and High Voltage 105°C

- Used in general electronic circuits as coupling, by-pass, filter etc..
- The product is applied for 105°C.

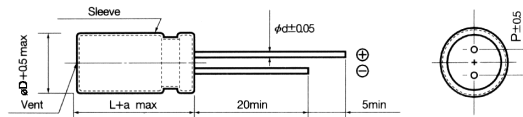
UTW, UTWHV Series

SPECIFICATION

ITEM	SPECIFICATION															
Capacitance Tolerance (120Hz 20°C)	± 20%(M)															
Rated Working Voltage	6.3 WV ~ 100 WV										160 WV ~ 450 WV					
Operation Temperature Range	(UTW) -40 ~ +105°C										(UTWHV) -25 ~ +105°C					
Surge Voltage (V) (20°C)	WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	SV	8	13	20	32	44	63	79	125	200	250	300	400	450	500	
Leakage Current (20°C)	≤ 0.01 CV or 3 Whichever is greater										≤ 0.03 CV + 10					
	After rated voltage applied for 3 minutes															
Dissipation Factor (tan δ) (120Hz 20°C)	Where	I : Leakage Current (μA)					C : Capacitance (μF)					V : Rated Voltage (V)				
	WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	DF	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.10	0.15	0.15	0.15	0.20	0.20	0.20	
Low Temperature Characteristics	Add 0.02 per 1000 μF for more than 1000 μF															
	Impedance ratio at 120Hz															
	Comparison Z/WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	-25°C / 20°C	4	3	2	2	2	2	2	2	3	3	3	4	4	4	
Load Life	After 2000 hours application of W.V. at 105°C, the capacitor shall meet the following limits.															
	Capacitance Change										≤ ±20% of Initial Value					
	Dissipation Factor										≤ ±200% of Initial Specified Value					
Shelf Life	Leakage Current										≤ Initial Specified Value					
	After 500 hours to place at 105°C without rated voltage applied, the capacitor shall meet the limits as same as load life.															
Others	Satisfied JIS C-5141															

* All UTW electrolytics are now 2000 hrs. The UTW series replaces UTWL.

DIMENSIONS (unit:mm)



φD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
a	1.0	1.0	1.0	1.0	2.0	2.0	2.0

RIPPLE CURRENT COEFFICIENTS

Frequency Multipliers

WV	Freq.(Hz)	50	120	1K	10K ~
	Cap.(μF)				
6.3 ~ 100	0.1 ~ 47	0.75	1.00	1.57	2.00
	100 ~ 470	0.80	1.00	1.34	1.50
	1000 ~ 15000	0.85	1.00	1.13	1.15
160 ~ 450	0.47 ~ 470	0.80	1.00	1.40	1.60

Temperature Multipliers

WV	Temp.(°C)	~ 75	85	105
6.3 ~ 100		1.78	1.40	1.00
	160 ~ 450	1.80	1.40	1.00

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CASE SIZE & MAX RIPPLE CURRENT

CASE SIZE ØDxL (mm)
 MAX RIPPLE CURRENT (mA/105°C, 120Hz)

CAP Code	WV µF	63		10		16		25		35		50		63		100		160		200		250		350		400		450	
		ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA
0R1	0.10											5x11	1.7																
R22	0.22											5x11	3.8																
R33	0.33											5x11	5.8																
R47	0.47											5x11	8			5x11	11	5x11	10										
010	1.0											5x11	13			5x11	16	5x11	14	5x11	14	6.3x11	14	6.3x11	14	8x11	14	8x11	14
2R2	2.2											5x11	19			5x11	23	6.3x11	20	6.3x11	20	8x11	22	8x11	22	10x12.5	22	10x15	22
3R3	3.3											5x11	26			5x11	30	8x11	26	8x11	26	8x11	26	10x15	28	10x15	28	10x15	30
4R7	4.7											5x11	30	5x11	33	5x11	33	8x11	32	8x11	32	10x17	33	10x17	32	10x17	32	10x17	32
100	10											5x11	45	5x11	52	6.3x11	56	10x15	49	10x17	51	10x17	52	10x17	58	10x20	62	13x20	64
220	22							5x11	59	5x11	64	5x11	71	6.3x11	87	8x11	93	10x17	83	10x20	89	10x20	93	13x20	96	13x20	98	16x26	100
330	33					5x11	67	5x11	71	5x11	78	6.3x11	94	8x11	115	10x12.5	124	10x20	120	13x20	125	13x20	127	13x25	130	13x25	135	16x36	140
470	47			5x11	71	5x11	82	5x11	87	6.3x11	105	6.3x11	140	8x11	145	10x15	153	13x20	163	13x25	169	13x25	171	16x26	177	16x36	180	18x36	184
101	100	5x11	98	5x11	115	6.3x11	135	6.3x11	145	8x11	175	8x14	190	10x12.5	203	10x20	280	16x26	230	16x26	225	16x32	255	18x36	276				
221	220	6.3x11	160	6.3x11	175	8x11	225	8x11	235	10x15	275	10x17	310	10x20	360	13x25	500	16x36	375	18x36	381	22x40	410						
331	330	8x11	205	8x11	245	8x11	270	8x14	287	10x17	330	10x20	410	13x20	495	16x26	625	18x40	460	22x40	450								
471	470	8x11	270	8x11	290	8x11	332	10x17	380	10x20	450	13x20	555	13x25	635	16x32	805	22x40	545										
681	680	8x14	330	8x14	380	10x15	545	10x20	665	13x20	745	13x20	694	16x26	1015	16x36	965												
102	1000	10x12.5	420	8x14	435	10x17	605	10x20	685	13x25	805	16x26	985	16x32	1130	22x40	973												
152	1500	10x17	615	10x17	765	13x20	875	13x25	1040	16x26	1130	16x32	1370	16x36	1270														
222	2200	10x20	765	10x20	791	13x20	955	13x25	1259	16x32	1310	16x36	1520																
332	3300	13x20	915	13x20	1015	13x20	1060	16x32	1420	16x36	1610																		
472	4700	13x20	1240	13x25	1310	13x30	1480	16x36	1710																				
682	6800	16x26	1380	16x26	1560	16x32	1810																						
103	10000	16x32	1630	18x36	1810																								
153	15000	18x36	1940																										