



Aluminum Electrolytic Capacitors

Radial Super Miniature 85°C and 105°C

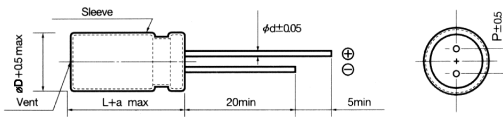
UTLM, UTWS Series

- The usage as same as RD/UTW series.
- It provides a smaller size as 9mm.
- The product is applied for 85°C (UTLM Series) or 105°C (UTWS Series)

SPECIFICATION

ITEM	SPECIFICATION										
Capacitance Tolerance (120Hz 20°C)	± 20% (M)										
Rated Working Voltage	4WV~63WV										
Operation Temperature Range	-40~ +85°C (UTLM Series)					-40~ + 105°C (UTWS Series)					
Surge Voltage (V) (20°C)	WV	4	6.3	10	16	25	35	50	63		
	SV	5	8	13	20	32	44	63	79		
Leakage Current (120Hz 20°C)	I ≤ 0.01 CV or 3 Whichever is greater										
	Where	I : Leakage Current (μA)					C : Capacitance (μF)				
Dissipation Factor (tan δ) (120Hz 20°C)	WV	4	6.3	10	16	25	35	50	63		
	DF	0.35	0.24	0.20	0.16	0.14	0.12	0.10	0.08		
Low Temperature Characteristics	Impedance ratio at 120Hz 20% of Initial Value										
	Comparison Z/WV	4	6.3	10	16	25	35	50	63		
	-25°C / 20°C	6	4	3	2	2	2	2	2	2	
	-40°C / 20°C	12	8	6	4	4	4	4	4	4	
Load Life	After 1000 hours application of W.V. at 85°C (UTLM Series) or 105°C (UTWS Series) the capacitor shall meet the following limits										
	Capacitance Change					≤ ± 20% of Initial Value					
	Dissipation Factor					≤ 200% of Initial Specified Value					
	Leakage Current					≤ Initial Specified Value					
Others	Satisfied JIS C-5141										

DIMENSIONS (unit:mm)



øD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ød	0.45	0.5	0.5	0.6
a	1.0	1.0	1.0	1.0

RIPPLE CURRENT COEFFICIENTS

Frequency Multipliers

Freq.(Hz)	50	120	1K	10K~
WV				
4 ~ 16	0.80	1.00	1.10	1.20
25 ~ 35	0.80	1.00	1.50	1.70
50 ~ 63	0.80	1.00	1.60	1.90

Temperature Multipliers

Temp.(°C)	~75	85	105
Coefficient	1.35	1.00	0.85

CASE SIZE & MAX RIPPLE CURRENT

CAP. Code	WV	CASE SIZE ØDxL (mm)										MAX RIPPLE CURRENT (mA/120Hz),(85°C / UTLM Series, 105°C / UTWS Series)									
		4		6.3		10		16		25		35		50		63					
μF		ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA				
0R1	0.10													4x7	1.0	4x7	1.3				
R22	0.22													4x7	2.3	4x7	2.9				
R33	0.33													4x7	3.5	4x7	4.4				
R47	0.47													4x7	5.0	4x7	7.9				
010	1.0													4x7	10	4x7	11				
2R2	2.2							4x7	6.5					4x7	15	4x7	17				
3R3	3.3							4x7	9					4x7	18	4x7	21				
4R7	4.7							4x7	17	4x7	20	4x7	24	4x7	23	5x7	26				
100	10							4x7	29	4x7	32	4x7	35	5x7	37	6.3x7	41				
220	22					4x7	35	4x7	39	5x7	48	6.3x7	57	6.3x7	65						
330	33	4x7	33	4x7	40	4x7	43	5x7	55	6.3x7	63	6.3x7	67	8x7	71						
470	47	4x7	39	4x7	48	4x7	57	5x7	65	6.3x7	69	6.3x7	73	8x9	79						
101	100	5x7	65	5x7	78	5x7	86	6.3x7	98												
221	220	6.3x7	110	6.3x7	120	6.3x7	131	8x9	136												
471	470			8x9	138	8x9	146	8x9	151												