ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UTH

High Voltage, Miniature sized, Long Life Assurance

Smaller | Long Life | High Ripple Current

NEW

- High ripple current.
- Load life of 5000 hours at 105°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

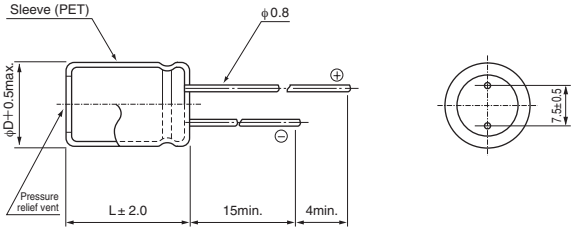
UPT
Smaller
UTH

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105°C
Rated Voltage Range	400 to 450V
Rated Capacitance Range	47 to 200μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current ※	After 1 minutes' application of rated voltage at 20°C, leakage current is not more than 0.04CV+100 (μA). After 5 minutes' application of rated voltage at 20°C, leakage current is not more than 0.02CV+25 (μA).
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C Rated voltage (V): 400 / 420 / 450 tan δ (max.): 0.20 / 0.20 / 0.20
Stability at Low Temperature	Measurement frequency : 120Hz Rated voltage (V): 400 / 420 / 450 Impedance ratio (max.) Z(−25°C) / Z(+20°C): 8 / 8 / 8
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 5000 hours at 105°C, the peak voltage shall not exceed the rated voltage. Capacitance change: Within ±20% of the initial capacitance value tan δ: 200% or less than the initial specified value Leakage current: Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.
Marking	Printed with white color letter on dark brown sleeve.

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■Radial Lead Type



- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

Type numbering system (Example : 450V 160μF)

1	2	3	4	5	6	7	8	9	10	11	12
U	T	H	2	W	1	6	1	M	N	D	

- 12: Size code
- 10, 11: Configuration
- 9: Capacitance tolerance (±20%)
- 6, 7, 8: Rated capacitance (160μF)
- 4, 5: Rated voltage (450V)
- 2, 3: Series name
- 1: Type

• Frequency coefficient of rated ripple current

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz～
Coefficient	0.80	1.00	1.25	1.40	1.60

●Dimension table in next page.

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■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA)		Rated Ripple (mArms) (105℃/120Hz)	Part Number
				at 20℃ after 1 minute	at 20℃ after 5 minutes		
400 (2G)	56	16×20	0.20	996	473	480	UTH2G560MND
	75	18×20	0.20	1300	625	550	UTH2G750MND
	82	16×26	0.20	1412	681	620	UTH2G820MND
	120	16×31.5	0.20	2020	985	790	UTH2G121MND
	120	18×26	0.20	2020	985	755	UTH2G121MND6
	140	16×36	0.20	2340	1145	870	UTH2G141MND
	150	18×31.5	0.20	2500	1225	915	UTH2G151MND
	160	16×40	0.20	2660	1305	920	UTH2G161MND
	180	18×36	0.20	2980	1465	950	UTH2G181MND
	200	18×40	0.20	3300	1625	1050	UTH2G201MND
420 (W6)	53	16×20	0.20	990.4	470.2	480	UTHW6530MND
	68	18×20	0.20	1242.4	596.2	540	UTHW6680MND
	82	16×26	0.20	1477.6	713.8	620	UTHW6820MND
	100	16×31.5	0.20	1780	865	750	UTHW6101MND
	110	18×26	0.20	1948	949	740	UTHW6111MND
	120	16×36	0.20	2116	1033	820	UTHW6121MND
	130	18×31.5	0.20	2284	1117	860	UTHW6131MND
	140	16×40	0.20	2452	1201	910	UTHW6141MND
	160	18×36	0.20	2788	1369	920	UTHW6161MND
	180	18×40	0.20	3124	1537	1040	UTHW6181MND
450 (2W)	47	16×20	0.20	946	448	430	UTH2W470MND
	62	18×20	0.20	1216	583	520	UTH2W620MND
	75	16×26	0.20	1450	700	570	UTH2W750MND
	100	16×31.5	0.20	1900	925	720	UTH2W101MND
	100	18×26	0.20	1900	925	690	UTH2W101MND6
	120	16×36	0.20	2260	1105	810	UTH2W121MND
	130	16×40	0.20	2440	1195	860	UTH2W131MND
	130	18×31.5	0.20	2440	1195	815	UTH2W131MND6
	140	18×36	0.20	2620	1285	900	UTH2W141MND
	160	18×40	0.20	2980	1465	980	UTH2W161MND

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code “1” and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.