ALUMINUM ELECTROLYTIC CAPACITORS

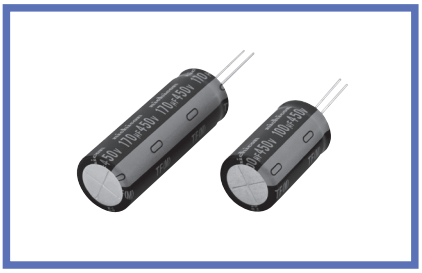
nichicon

UTF

High Voltage, High Ripple Current

Smaller | Long Life | High Ripple Current

NEW



- High ripple current.
- Load life of 5000 hours at 105°C.
- Ideal for automotive applications (e.g. on board chargers).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.

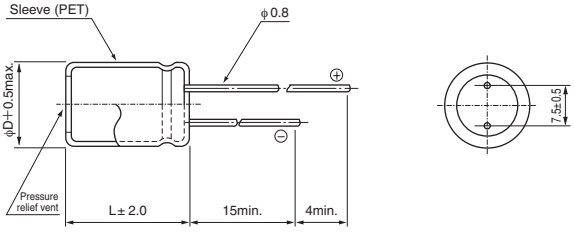
UTF ← High Ripple Current → UTH

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105°C
Rated Voltage Range	450V
Rated Capacitance Range	100 to 170μF
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): 450 tan δ (max.): 0.20
Stability at Low Temperature	Measurement frequency : 120Hz Rated voltage (V): 450 Impedance ratio (max.): Z(−25°C) / Z(+20°C): 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 150μF)

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

- 12: Size code
- 10, 11: Configuration
- 9: Capacitance tolerance (±20%)
- 6, 7, 8: Rated capacitance (150μF)
- 4, 5: Rated voltage (450V)
- 3: Series name
- 1, 2: Type

• Frequency coefficient of rated ripple current

Frequency	50Hz	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.70	1.00	1.65	2.00	2.15

●Dimension table in next page.

UTF

■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		
450 (2W)	100	18×31.5	0.20	1900	925	1160	UTF2W101MND
	120	18×36	0.20	2260	1105	1360	UTF2W121MND
	130	18×40	0.20	2440	1195	1410	UTF2W131MND
	150	18×46	0.20	2800	1375	1670	UTF2W151MND
	170	18×50	0.20	3160	1555	1760	UTF2W171MND

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.