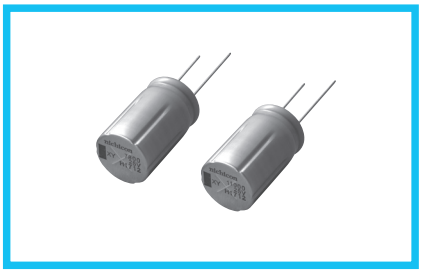
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UXY

Miniature Sized, Vibration Resistance
For +125°C or 135°C Use
(125°C / 135°C 3000hour)

Smaller | Low Impedance | Anti-Solvent Feature



- Anti-vibration structuring than UBY.
- Suited for automobile electronics where heavy duty services are indispensable.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

UBY → Vibration Resistance → UXY

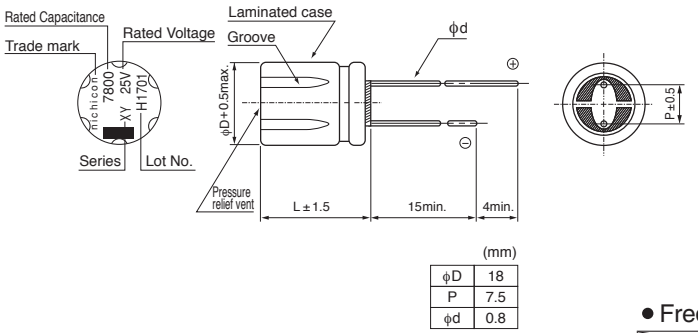
■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +135°C
Rated Voltage Range	25 to 35V
Rated Capacitance Range	5000 to 11000μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current ※	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA)
Tangent of loss angle (tan δ)	Rated voltage (V): 25 / 35; tan δ (max.): 0.14 / 0.12 (120Hz, 20°C) For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.
Stability at Low Temperature	120Hz Rated voltage (V): 25 / 35 Impedance ratio (max.) Z(−25°C) / Z(+20°C): 2 / 2 Impedance ratio (max.) Z(−40°C) / Z(+20°C): 4 / 4
Endurance	The specifications listed below shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 3000 hours at 125°C or 135°C, the peak voltage shall not exceed the rated voltage. Capacitance change: Within ±30% of the initial capacitance value tan δ: 300% 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 125˚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.
Vibration	The specifications listed below shall be met when the capacitors are restored to 20°C after subjected to vibration conditions at room temperature(15 to 35˚C). Capacitance change: Within ±5% of the initial capacitance value tan δ: Less than or equal to the initial specified value Leakage current: Less than or equal to the initial specified value Vibration conditions Vibration frequency range: 10 to 2000Hz Amplitude or acceleration: Total amplitude either 1.5mm or 392m/s²(40G) whichever is looser Sweep rate: 0.5 octaves/minute Vibration direction and time: X,Y,Z in each direction for two hours, totalling six hours Fixed: Fixed product and lead lines on stationary object (please inquire for more details)
Marking	Black print on the case top.

The UXY series places emphasis on high ripple current, as a result the lifetime calculation is different than other series. Please contact Nichicon for details.

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

■Radial Lead Type



(mm)

φD	18
P	7.5
φd	0.8

Type numbering system (Example : 25V 7800μF)

1	2	3	4	5	6	7	8	9	10	11
U	X	Y	1	E	7	8	2	M	H	W

- 1–3: Type
- 4–5: Series name
- 6–8: Rated voltage (25V)
- 9: Rated capacitance (7800μF)
- 10: Capacitance tolerance (±20%)
- 11: Configuration

● Frequency coefficient of rated ripple current

Cap. (μF) \ Frequency	120Hz	1kHz	10kHz	100kHz or more
5000 to 11000	0.85	0.95	0.98	1.00

● Dimension table in next page.

UXY

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	ESR(Ω)max.		Rated Ripple (mArms)		Part Number
					20℃/ 100kHz	−40℃/ 100kHz	125℃/ 100kHz	135℃/ 100kHz	
25 (1E)	7800	18×30.5	0.26	5850	0.023	0.19	5380	3330	UXY1E782MHW
	11000	18×40	0.34	8250	0.019	0.13	6800	3900	UXY1E113MHW
35 (1V)	5000	18×30.5	0.20	5250	0.023	0.19	5380	3330	UXY1V502MHW
	7300	18×40	0.24	7665	0.019	0.13	6800	3900	UXY1V732MHW

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.