

ALUMINUM ELECTROLYTIC CAPACITORS

UXY

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



NEW



- Smaller and higher ripple current and Anti-vibration structuring than UBY.
- Suited for automobile electronics where heavy duty services are indispensable.
- Compliant to the RoHS directive(2011/65/EU).

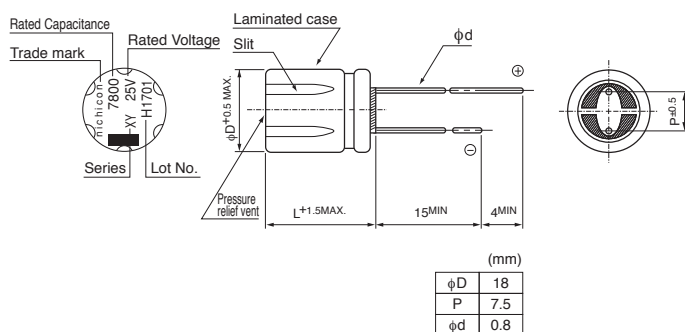


Specifications

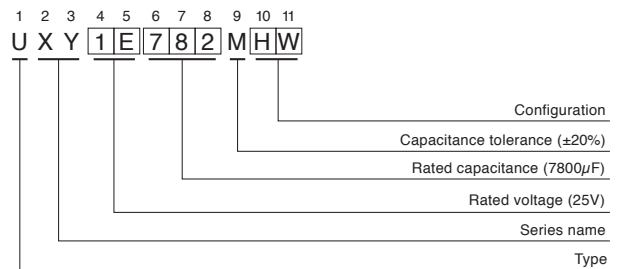
Item	Performance Characteristics																	
Category Temperature Range	-40 to +135°C																	
Rated Voltage Range	25 to 50V																	
Rated Capacitance Range	2300 to 11000μF																	
Capacitance Tolerance	±20% at 120Hz, 20°C																	
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA)																	
Tangent of loss angle (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>25</td> <td>35</td> <td>50</td> <td>120Hz, 20°C</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td></td> </tr> </table> <p>For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.</p>	Rated voltage (V)	25	35	50	120Hz, 20°C	tan δ (MAX.)	0.14	0.12	0.10								
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Endurance	<p>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.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>300% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	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											
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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	<p>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).</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±5% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>Less than or equal to the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table> <p>Vibration conditions</p> <table border="1"> <tr> <td>Vibration frequency range</td> <td>10 to 2000Hz</td> </tr> <tr> <td>Amplitude or acceleration</td> <td>Total amplitude either 1.5mm or 392m/S²(40G) whichever is looser</td> </tr> <tr> <td>Sweep rate</td> <td>0.5 octaves/minute</td> </tr> <tr> <td>Vibration direction and time</td> <td>X, Y, Z in each direction for two hours, totalling six hours</td> </tr> <tr> <td>Fixed</td> <td>Fixed product and lead lines on stationary object (please inquire for more details)</td> </tr> </table>	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 frequency range	10 to 2000Hz	Amplitude or acceleration	Total amplitude either 1.5mm or 392m/S ² (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)	
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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.

Radial Lead Type



Type numbering system (Example : 25V 7800μF)



Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

●Dimension table in next page.

UXY

■ Dimensions

V (Code)		25(1E)				
Cap.(μ F)	Code	Item Case size ϕ D \times L (mm)	ESR(Ω) MAX.		Rated ripple (mArms)	
			20°C /100kHz	-40°C /100kHz	125°C /100kHz	135°C /100kHz
7800	782	18 \times 31.5	0.023	0.19	5380	3330
11000	113	18 \times 40	0.019	0.13	6800	3900

V (Code)		35(1V)				
Cap.(μ F)	Code	Item Case size ϕ D \times L (mm)	ESR(Ω) MAX.		Rated ripple (mArms)	
			20°C /100kHz	-40°C /100kHz	125°C /100kHz	135°C /100kHz
5000	502	18 \times 31.5	0.023	0.19	5380	3330
7300	732	18 \times 40	0.019	0.13	6800	3900

V (Code)		50(1H)				
Cap.(μ F)	Code	Item Case size ϕ D \times L (mm)	ESR(Ω) MAX.		Rated ripple (mArms)	
			20°C /100kHz	-40°C /100kHz	125°C /100kHz	135°C /100kHz
2300	232	18 \times 31.5	0.029	0.26	5050	2910
3300	332	18 \times 40	0.024	0.20	5930	3420

● Frequency coefficient of rated ripple current

Cap. (μ F)	Frequency	120Hz	1kHz	10kHz	100kHz or more
2300 to 3300		0.75	0.90	0.95	1.00
5000 to 11000		0.85	0.95	0.98	1.00