ALUMINUM ELECTROLYTIC CAPACITORS

nichicon



Wide Temperature Range, Permissible Abnormal Voltage (Radial Lead Type) series

- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Compliant to the RoHS directive (2011/65/EU).

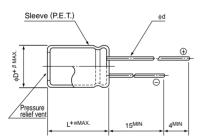


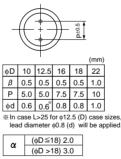


Specifications

Item	Performance Characteristics								
Category Temperature Range	-40 to +105°C								
Rated Voltage Range	200 • 400V								
Rated Capacitance Range	10 to 220µF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 1 minute's application of rated voltage, leakage current is 0.04CV+100 (µA) or less.								
Tangent of loss angle (tan $\delta)$	Rated voltage (V) 200 400 tan δ (MAX.) 0.15 0.15								
	Rated voltage (V)		200		400	Measurement frequency : 120Hz			
Stability at Low Temperature	7-25°C	/ Z+20°C	3		8				
	Impedance ratio ZT / Z20 (MAX.) Z-40°C	/ Z+20°C	6		10				
	The specifications listed at right shall be met capacitors are restored to 20°C after D.C. bi	bias plus rated Capacitance change							
Endurance	ripple current is applied for 2000 hours at 10				-	200% or less than the initial specified value			
	voltage shall not exceed the rated voltage.	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.								
Safety Performance	The pressure relief vent will operate in normal conditions, with no dangerous conditons such as flames, ignitions or dispersion of pieces of the capacitor and / or case.								
	voltage (V)	Test conditions							
	voltage (v)	Limited DC current			ent	Test Voltage			
	200	4A				300VDC and 375VDC			
	400	2A				500VDC and 600VDC			
Marking	Printed with white color letter on dark brown	sleeve.							

Radial Lead Type

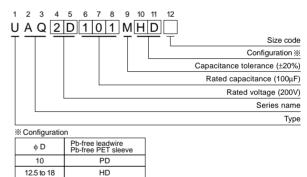




Type numbering system (Example : $200V \ 100\mu F$)

RD

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• Please refer to page 20 about the end seal configuration.

Dimensions

	V(Code)	200 (2D)					400 (2G)			
Cap.(µF)	Code ϕD	¢10	¢12.5	¢16	¢18	¢22	¢12.5	¢16	¢18	¢22
10	100						<u>12.5×20</u> 100			
22	220	10×20 120					<u>12.5 × 31.5</u> 145	<u>°16×20</u> 145		
33	330	10×25 160	<u>012.5 × 20</u> 160				12.5 × 40 195	<u>016 × 25</u> 195	_ <u>* 18 × 20</u> 195	
47	470	10 × 31.5 195	<u>∘12.5 × 20</u> 195					<u>16 × 35.5</u> 280	<u>018 × 25</u> 280	<u>* 22 × 20</u> 280
56	560		_12.5 × 25 210					<u>16 × 35.5_</u> 320	<u>018 × 31.5</u>	<u>*22×25</u> 320
68	680		_12.5 × 25 					<u>16 × 40</u> 350	<u>018 × 35.5</u> 350	
82	820		12.5×31.5 285	<u>016 × 20</u> 285					$-\underline{18 \times 40}_{420} - \underline{-}$	
100	101		12.5×35.5 335	<u>∘16 × 25</u> 335	<u>* 18 × 20</u> 335					
150	151			<u>16 × 31.5</u> 435	<u>°18 × 25</u> 435	<u>* 22 × 20</u> 435				
180	181			<u>16 × 35.5</u> 495	18 × 31.5 495	<u>* 22 × 25</u> 495				
220	221				<u>18 × 35.5</u> 575					Case size

• Frequency coefficient of rated ripple current

	Frequency	50, 60Hz	120Hz	300Hz	1kHz	10kHz or more
Γ	Coefficient	0.80	1.00	1.25	1.40	1.60

Rated ripple current (mArms) at 105°C 120Hz • : In case of low profile type, 6 will be put at 12th digit of type numbering system.

* : For further low profile product, 3 will be put at 12th digit.

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

