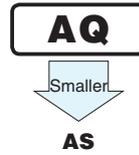


ALUMINUM ELECTROLYTIC CAPACITORS

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

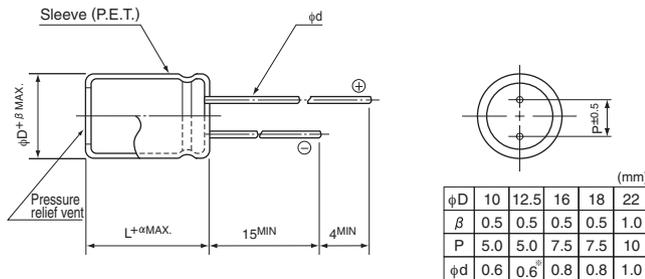
- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

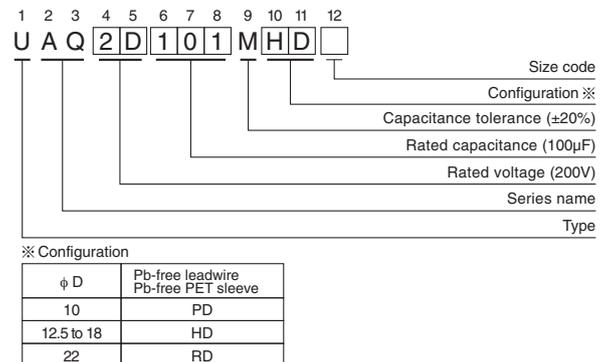
Item	Performance Characteristics									
Category Temperature Range	-40 to +105°C									
Rated Voltage Range	200 · 400V									
Rated Capacitance Range	10 to 220µF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is 0.04CV+100 (µA) or less.									
Tangent of loss angle (tan δ)	Rated voltage (V)	200	400	Measurement frequency: 120Hz at 20°C						
	tan δ (MAX.)	0.15	0.15							
Stability at Low Temperature	Rated voltage (V)		200	400	Measurement frequency : 120Hz					
	Impedance ratio ZT / Z20 (MAX.)		Z-25°C / Z+20°C 3	Z-40°C / Z+20°C 6						
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 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage.			<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% 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 ±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
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.									
Safety Performance	The pressure relief vent will operate in normal conditions, with no dangerous conditions such as flames, ignitions or dispersion of pieces of the capacitor and / or case.									
	voltage (V)	Test conditions								
		Limited DC current	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



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

Type numbering system (Example : 200V 100µF)



Dimensions

Cap. (µF)	Code	200 (2D)					400 (2G)				
		φ10	φ12.5	φ16	φ18	φ22	φ12.5	φ16	φ18	φ22	
10	100						12.5 × 20 100				
22	220	10 × 20 120					12.5 × 31.5 145	φ16 × 20 145			
33	330	10 × 25 160	φ12.5 × 20 160				12.5 × 40 195	φ16 × 25 195	* 18 × 20 195		
47	470	10 × 31.5 195	φ12.5 × 20 195					16 × 35.5 280	φ18 × 25 280	* 22 × 20 280	
56	560		12.5 × 25 210					16 × 35.5 320	φ18 × 31.5 320	* 22 × 25 320	
68	680		12.5 × 25 250					16 × 40 350	φ18 × 35.5 350		
82	820		12.5 × 31.5 285	φ16 × 20 285					18 × 40 420		
100	101		12.5 × 35.5 335	φ16 × 25 335	* 18 × 20 335						
150	151			16 × 31.5 435	φ18 × 25 435	* 22 × 20 435					
180	181			16 × 35.5 495	φ18 × 31.5 495	* 22 × 25 495					
220	221				18 × 35.5 575					Case size φD×L (mm) Rated ripple	

Frequency coefficient of rated ripple current

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

- : 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.

CAT.8100D

Mouser Electronics

Authorized Distributor

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[UAQ2D181MHD16](#) [UAQ2G560MHD16](#) [UAQ2G560MHD18](#) [UAQ2G680MRD22](#)