

UAQWide Temperature Range, Permissible
Abnormal Voltage

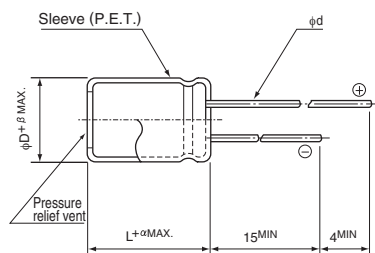
- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

UAQSmaller
UAS

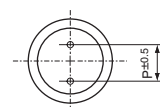
■ Specifications

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)	<table><tr><td>Rated voltage (V)</td><td>200</td><td>400</td></tr><tr><td>tan δ (MAX.)</td><td>0.15</td><td>0.15</td></tr></table>			Rated voltage (V)	200	400	tan δ (MAX.)	0.15	0.15	Measurement frequency:120Hz at 20°C
	Rated voltage (V)	200	400							
tan δ (MAX.)	0.15	0.15								
Stability at Low Temperature	Rated voltage (V)		200	400	Measurement frequency : 120Hz					
	Impedance ratio (MAX.)	Z-25°C / Z+20°C	3	8						
		Z-40°C / Z+20°C	6	10						
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.				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 conditons 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.



	φD	10	12.5	16	18	22
P	5.0	5.0	7.5	7.5	10	
φd	0.6	0.6*	0.8	0.8	1.0	
β	0.5	0.5	0.5	0.5	1.0	

※ In case L>25 for φ12.5 (D) case sizes, lead diameter φ0.8 (d) will be applied.

α	(φD≤18) 2.0
	(φD>18) 3.0

Type numbering system (Example : 200V 100µF)

1	2	3	4	5	6	7	8	9	10	11	12
U	A	Q	2	D	1	0	1	M	H	D	
Size code											
Configuration ※											
Capacitance tolerance (±20%)											
Rated capacitance (100µF)											
Rated voltage (200V)											
Series name											
Type											

※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 to 18	HD
22	RD

■ Dimensions

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

Rated ripple current (mA rms) 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.

CAT.81001

● 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

Mouser Electronics

Authorized Distributor

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Nichicon:

<u>UAQ2D151MRD3</u>	<u>UAQ2D220MPD10</u>	<u>UAQ2D330MPD10</u>	<u>UAQ2D330MHD12</u>	<u>UAQ2D470MPD</u>	<u>UAQ2D470MHD12</u>
<u>UAQ2D560MHD12</u>	<u>UAQ2D680MHD12</u>	<u>UAQ2D820MHD12</u>	<u>UAQ2D820MHD16</u>	<u>UAQ2D101MHD12</u>	
<u>UAQ2D101MHD16</u>	<u>UAQ2D101MHD18</u>	<u>UAQ2D151MHD16</u>	<u>UAQ2D151MHD18</u>	<u>UAQ2D181MHD18</u>	
<u>UAQ2D181MRD22</u>	<u>UAQ2D221MHD18</u>	<u>UAQ2G100MHD12</u>	<u>UAQ2G220MHD12</u>	<u>UAQ2G220MHD16</u>	
<u>UAQ2G330MHD12</u>	<u>UAQ2G330MHD16</u>	<u>UAQ2G330MHD18</u>	<u>UAQ2G470MHD16</u>	<u>UAQ2G470MHD18</u>	
<u>UAQ2G560MRD22</u>	<u>UAQ2G680MHD16</u>	<u>UAQ2G680MHD18</u>	<u>UAQ2G820MHD18</u>	<u>UAQ2G100MHD</u>	<u>UAQ2G820MHD</u>