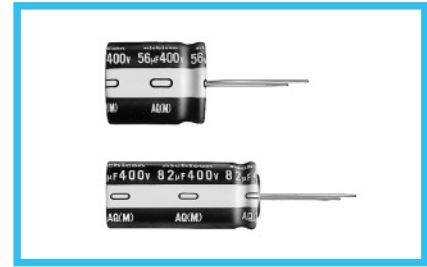
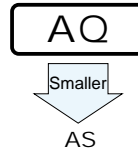


## AQ Wide Temperature Range, Permissible Abnormal Voltage (Radial Lead Type) series

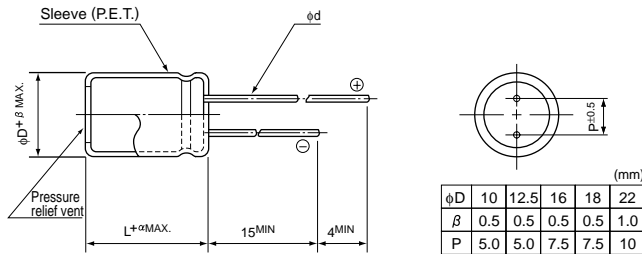
- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Compliant to the RoHS directive (2002/95/EC).



### 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 δ)	Rated voltage (V)	200	400	Measurement frequency:120Hz, Temperature: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 8	
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
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.				
	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.				
Safety Performance	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



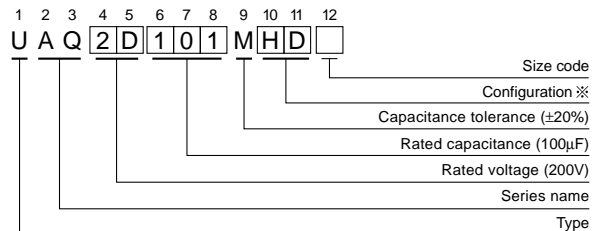
- Please refer to page 20 about the end seal configuration.

	(mm)				
φD	10	12.5	16	18	22
β	0.5	0.5	0.5	0.5	1.0
P	5.0	5.0	7.5	7.5	10
φd	0.6	0.6	0.8	0.8	1.0

※ In case L>25 for φ12.5 (D) case sizes, lead diameter φ(0.8 (d)) will be applied.

α	φD ≤ 18	2.0
	φD > 18	3.0

### Type numbering system (Example : 200V 100µF)



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

### Dimensions

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

Rated ripple current (mA rms) at 105°C 120Hz

### 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.8100Y