

ALUMINUM ELECTROLYTIC CAPACITORS

UAS

Wide Temperature Range, Miniature Type Permissible Abnormal Voltage



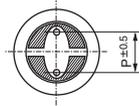
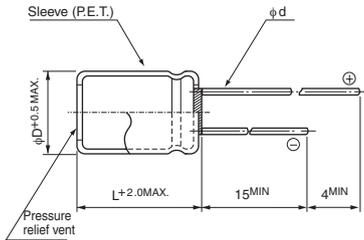
- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



Specifications

Item	Performance Characteristics			
Category Temperature Range	-40 to +105°C			
Rated Voltage Range	200V, 400V			
Rated Capacitance Range	22 to 330μF			
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	
	tan δ (MAX.)	0.15	0.15	
Measurement frequency:120Hz at 20°C				
Stability at Low Temperature	Rated voltage (V)		200	400
	Impedance ratio (MAX.)	Z-25°C / Z+20°C	3	8
		Z-40°C / Z+20°C	6	10
Measurement frequency : 120Hz				
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 leaving capacitors under no load at 105°C for 1000 hours they shall meet the specified values for the endurance characteristics listed above.			
	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.			
	Leakage current			
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 (5A : 330μF)	300VDC and 375VDC
400	2A (4A : 100μF or more)	500VDC and 600VDC		
Marking	Printed with white color letter on dark brown sleeve.			

Radial Lead Type

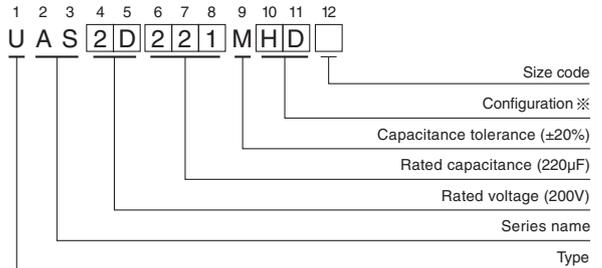


	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6 ^(*)	0.8	0.8

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

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

Type numbering system (Example : 200V 220μF)



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

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

● Dimension table in next page.

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
200 (2D)	33	10×20	0.15	364	160	UAS2D330MPD
	47	10×25	0.15	476	195	UAS2D470MPD
	47	12.5×20	0.15	476	195	UAS2D470MHD6
	56	12.5×20	0.15	548	210	UAS2D560MHD
	68	12.5×25	0.15	644	320	UAS2D680MHD
	82	12.5×25	0.15	756	360	UAS2D820MHD
	100	12.5×31.5	0.15	900	430	UAS2D101MHD
	100	16×20	0.15	900	430	UAS2D101MHD6
	150	16×25	0.15	1300	460	UAS2D151MHD
	150	18×20	0.15	1300	460	UAS2D151MHD6
	180	16×31.5	0.15	1540	600	UAS2D181MHD
	180	18×25	0.15	1540	600	UAS2D181MHD6
	220	18×31.5	0.15	1860	710	UAS2D221MHD
	270	18×35.5	0.15	2260	890	UAS2D271MHD
	330	18×40	0.15	2740	910	UAS2D331MHD
400 (2G)	22	12.5×20	0.15	452	165	UAS2G220MHD
	27	12.5×25	0.15	532	200	UAS2G270MHD
	33	16×20	0.15	628	225	UAS2G330MHD
	39	16×25	0.15	724	255	UAS2G390MHD
	39	18×20	0.15	724	255	UAS2G390MHD6
	47	16×25	0.15	852	290	UAS2G470MHD
	47	18×20	0.15	852	280	UAS2G470MHD6
	56	16×31.5	0.15	996	340	UAS2G560MHD
	56	18×25	0.15	996	320	UAS2G560MHD6
	68	16×35.5	0.15	1188	385	UAS2G680MHD
	68	18×25	0.15	1188	360	UAS2G680MHD6
	82	16×40	0.15	1412	435	UAS2G820MHD
	82	18×31.5	0.15	1412	430	UAS2G820MHD6
	100	18×35.5	0.15	1700	490	UAS2G101MHD
	120	18×40	0.15	2020	540	UAS2G121MHD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.