

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

AS

Wide Temperature Range, Miniature Type Permissible
Abnormal Voltage
series

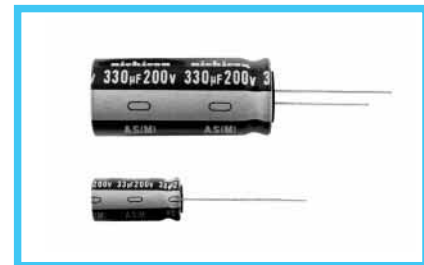


Smaller

AQ



AS

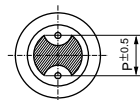
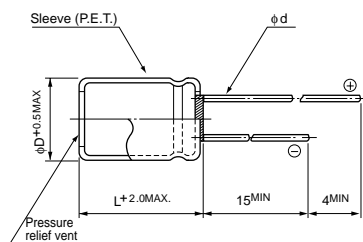


- Improved safety feature for abnormally excessive voltage.
- High ripple current product.
- Adapted to the RoHS directive (2002/95/EC).

Specifications

Item	Performance Characteristics		
Category Temperature Range	-40 ~ +105°C		
Rated Voltage Range	200V		
Rated Capacitance Range	33 ~ 330μF		
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.		
tan δ	Rated voltage (V)	200	Measurement frequency:120Hz, Temperature:20°C
	tan δ (MAX.)	0.15	
Stability at Low Temperature	Rated voltage (V)		200
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	3
		Z-40°C / Z+20°C	6
Endurance	After an application of D.C. bias voltage plus the rated ripple current for 2000 hours at 105°C the peak voltage shall not exceed the rated D.C. voltage, capacitors meet the characteristic requirements listed at right.		
	Capacitance change	Within ±20% of initial value	
	tan δ	200% or less of initial specified value	
Shelf Life	Leakage current	Initial specified value or less	
	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for 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
Marking	200	4A (5A : 330μF)	300VDC and 375VDC
	Printed with white color letter on dark brown sleeve.		

Radial Lead Type



(mm)	10	12.5	16	18
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.

Type numbering system (Example : 200V 220μF)

1	2	3	4	5	6	7	8	9	10	11	12
U	A	S	2	D	2	2	1	M	H	D	
											Size code
											Configuration ※
											Capacitance tolerance (±20%)
											Rated Capacitance (220μF)
											Rated voltage (200V)
											Series name
											Type

※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 ~ 18	HD

Dimensions

φD×L (mm)

		V	200 (2D)							
Cap. (μF)	Code	φD	10		12.5		16		18	
33	330		10 × 20	160					Case size	Rated ripple
47	470		10 × 25	195	▲ 12.5 × 20	195				
56	560				12.5 × 20	210				
68	680				12.5 × 25	320				
82	820				12.5 × 25	360				
100	101				12.5 × 31.5	430	▲ 16 × 20	430		
150	151						16 × 25	460	▲ 18 × 20	460
180	181						16 × 31.5	600	▲ 18 × 25	600
220	221								18 × 31.5	710
270	271								18 × 35.5	890
330	331								18 × 40	910

Rated Ripple (mA rms) at 105°C 120Hz

▲: In this case, 6 will be put at 12th digit of type numbering system.

Frequency coefficient of rated ripple current

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

Please refer to page 21, 22, 23 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.

CAT.8100U