

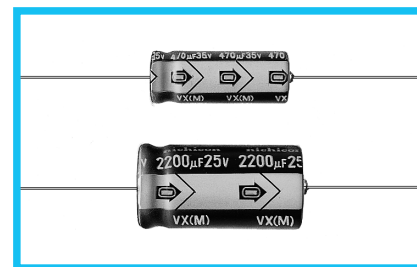
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

VX Standard, For General Purposes - Axial Lead Type
(02 type) series



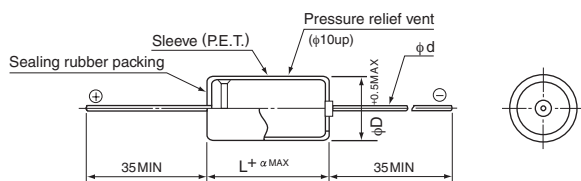
- Axial lead type of standard series for general purposes.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

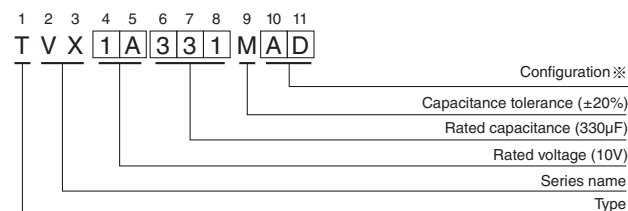
Item	Performance Characteristics	
Category Temperature Range	-40 to +85°C (6.3 to 250V), -25 to +85°C (315 to 450V)	
Rated Voltage Range	6.3 to 450V	
Rated Capacitance Range	0.47 to 10000µF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Leakage Current	Rated voltage (V)	6.3 to 100
	Leakage current	After 1 minute's application of rated voltage at 20°C, not more than 0.03CV or 4 (µA), whichever is greater. After 2 minutes' application of rated voltage at 20°C, not more than 0.01CV or 3 (µA), whichever is greater.
Tangent of loss angle (tan δ)	Rated voltage (V)	6.3 10 16 25 35 50 63 to 100 160 to 315 350 to 450
	tan δ (MAX.)	0.24 0.20 0.16 0.14 0.12 0.10 0.08 0.20 0.25
Stability at Low Temperature	Rated voltage (V)	6.3 10 16 25 35 to 100 160 to 250 315 · 350 400 · 450
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C 4 3 2 2 2 4 6 15 Z-40°C / Z+20°C 10 8 6 4 3 12 — —
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C.	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 85°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 characteristic requirements at right.	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
Marking	Printed with white color letter on purple blue sleeve.	

Axial Lead Type



α	(φD < 10) 1	φD 5 to 13 16 to 18	(mm)
	(φD ≥ 10) 2	φd 0.6 0.8	

Type numbering system (Example : 10V 330µF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
5 to 8	AD
10 to 18	CD

Please refer to page 22 about the taped product spec.
Please refer to page 4 for the minimum order quantity.

●Dimension table in next page.

CAT.8100D



■ Dimensions

V	6.3	10	16	25	35	50	63	100
Cap.(μF)	0J	1A	1C	1E	1V	1H	1J	2A
0.47	R47					5 × 12	5	5 × 12
1	010					5 × 12	10	5 × 12
2.2	2R2					5 × 12	23	5 × 12
3.3	3R3					5 × 12	28	5 × 12
4.7	4R7					5 × 12	34	5 × 12
10	100					5 × 12	50	5 × 12
22	220				5 × 12	70	6.3 × 12	85
33	330			5 × 12	80	6.3 × 12	90	6.3 × 16
47	470		5 × 12	85	6.3 × 12	100	6.3 × 16	120
100	101	5 × 12	110	6.3 × 12	130	6.3 × 16	170	8 × 16
220	221	6.3 × 16	200	6.3 × 16	210	8 × 16	210	8 × 16
330	331	6.3 × 16	250	8 × 16	300	8 × 16	280	8 × 20
470	471	8 × 16	330	8 × 16	350	8 × 20	430	10 × 26
1000	102	10 × 21	600	10 × 21	640	10 × 26	770	13 × 26
2200	222	13 × 26	1020	13 × 26	1090	13 × 31.5	1180	16 × 31.5
3300	332	13 × 26	1200	13 × 31.5	1390	16 × 31.5	1620	16 × 41.5
4700	472	16 × 31.5	1500	16 × 31.5	1730	16 × 41.5	1840	18 × 41
6800	682	16 × 31.5	1840	16 × 41.5	1930	18 × 41	2310	
10000	103	16 × 41.5	2260	18 × 41	2350			

V	160	200	250	315	350	400	450
Cap.(μF)	2C	2D	2E	2F	2V	2G	2W
1	010	6.3 × 12	13	6.3 × 12	13	6.3 × 16	14
2.2	2R2	6.3 × 16	23	6.3 × 16	23	8 × 16	27
3.3	3R3	8 × 16	33	8 × 16	33	8 × 20	36
4.7	4R7	8 × 16	39	8 × 16	39	8 × 20	45
10	100	8 × 20	60	10 × 21	70	10 × 26	80
22	220	10 × 26	120	13 × 26	140	13 × 31.5	150
33	330	13 × 26	170	13 × 26	170	13 × 31.5	190
47	470	13 × 31.5	230	13 × 31.5	230	16 × 31.5	260
100	101	16 × 41.5	430	16 × 41.5	430	16 × 31.5	210

Rated ripple current (mA) at 85°C 120Hz

● Frequency coefficient of rated ripple current

V	Frequency Cap.(μF)	120 Hz	300 Hz	1kHz	10kHz or more
6.3 to 100	0.47 to 47	1.00	1.35	1.57	2.00
	100 to 470	1.00	1.23	1.34	1.50
	1000 to 10000	1.00	1.10	1.13	1.15
160 to 450	1 to 100	1.00	1.25	1.40	1.60