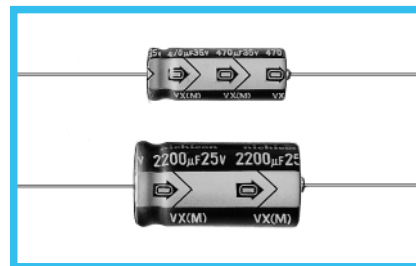


VX Standard, For General Purposes - Axial Lead Type (02 type) series

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



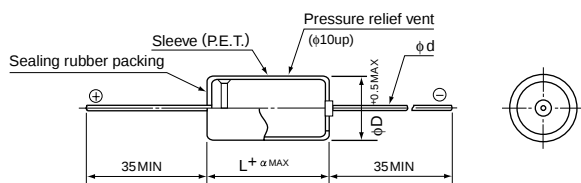
Anti-Solvent
Feature
(Through 100V only)



Specifications

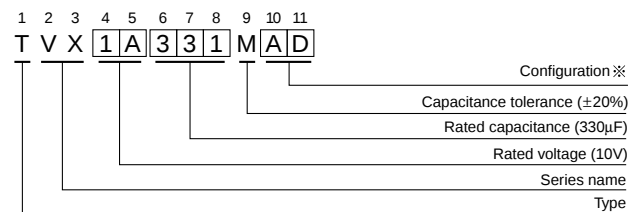
Item	Performance Characteristics									
Category Temperature Range	-40 to +85°C (6.3 to 250V), -25 to +85°C (315 to 450V)									
Rated Voltage Range	6.3 to 450V									
Rated Capacitance Range	0.47 to 10000μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	Rated voltage (V)	6.3 to 100					160 to 450			
	Leakage current	After 1 minute's application of rated voltage, not more than 0.03CV or 4 (μA) , whichever is greater. After 2 minutes' application of rated voltage, not more than 0.01CV or 3 (μA) , whichever is greater.					In case of CV ≦ 1000 After 1 minute's application of rated voltage, not more than 0.1CV+40 (μA) . In case of CV > 1000 After 1 minute's application of rated voltage, not more than 0.04CV+100 (μA) .			
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C									
	Rated voltage (V) tan δ (MAX.)	6.3 0.24	10 0.20	16 0.16	25 0.14	35 0.12	50 0.10	63 to 100 0.08	160 to 315 0.20	350 to 450 0.25
For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.										
Stability at Low Temperature	Measurement frequency : 120Hz									
	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 Z-40°C / Z+20°C	4 10	3 8	2 6	2 4	2 3	4 12	6 —	15 —
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

φD	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.

■Dimensions

V		6.3		10		16		25		35		50		63		100	
Cap.(μF)	Code	0J		1A		1C		1E		1V		1H		1J		2A	
0.47	R47											5 × 12	5			5 × 12	10
1	010											5 × 12	10			5 × 12	18
2.2	2R2											5 × 12	23			5 × 12	28
3.3	3R3											5 × 12	28			5 × 12	34
4.7	4R7											5 × 12	34			5 × 12	40
10	100											5 × 12	50	5 × 12	55	6.3 × 12	60
22	220									5 × 12	70	6.3 × 12	85	6.3 × 12	90	8 × 16	120
33	330							5 × 12	80	6.3 × 12	90	6.3 × 16	110	6.3 × 16	120	8 × 16	150
47	470					5 × 12	85	6.3 × 12	100	6.3 × 16	120	6.3 × 16	130	8 × 16	160	8 × 20	190
100	101	5 × 12	110	6.3 × 12	130	6.3 × 16	160	6.3 × 16	170	8 × 16	210	8 × 16	220	8 × 20	260	10 × 26	340
220	221	6.3 × 16	200	6.3 × 16	210	8 × 16	260	8 × 16	280	8 × 20	340	10 × 21	410	10 × 26	480	13 × 26	560
330	331	6.3 × 16	250	8 × 16	300	8 × 16	320	8 × 20	380	10 × 21	460	10 × 26	560	13 × 26	650	13 × 31.5	750
470	471	8 × 16	330	8 × 16	350	8 × 20	430	10 × 26	510	10 × 26	610	13 × 26	730	13 × 31.5	840	16 × 31.5	970
1000	102	10 × 21	600	10 × 21	640	10 × 26	770	13 × 26	900	13 × 31.5	1060	16 × 31.5	1260	16 × 31.5	1330		
2200	222	13 × 26	1020	13 × 26	1090	13 × 31.5	1180	16 × 31.5	1480	16 × 31.5	1580	18 × 41	1920				
3300	332	13 × 26	1200	13 × 31.5	1390	16 × 31.5	1620	16 × 41.5	1710	16 × 41.5	2050						
4700	472	16 × 31.5	1500	16 × 31.5	1730	16 × 41.5	1840	18 × 41	2170								
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)	Code	2C		2D		2E		2F		2V		2G		2W	
1	010	6.3×12	13	6.3×12	13	6.3×16	14	6.3×16	14	6.3×16	12	8×16	14	8×16	14
2.2	2R2	6.3×16	23	6.3×16	23	8×16	27	8×16	27	8×16	24	8×20	28	10×21	31
3.3	3R3	8×16	33	8×16	33	8×16	33	8×20	36	8×20	32	10×21	38	10×21	38
4.7	4R7	8×16	39	8×16	39	8×20	45	8×20	45	10×21	46	10×21	46	10×26	50
10	100	8×20	60	10×21	70	10×21	70	10×26	80	13×26	85	13×26	85	13×26	85
22	220	10×26	120	13×26	140	13×26	140	13×31.5	150	13×31.5	140	16×31.5	150	16×31.5	150
33	330	13×26	170	13×26	170	13×31.5	190	16×31.5	210	16×31.5	190	16×41.5	210	18×41	230
47	470	13×31.5	230	13×31.5	230	16×31.5	260	16×31.5	260	16×41.5	260	18×41	290	Case size φD×L (mm)	Rated ripple
100	101	16×41.5	430	16×41.5	430	16×41.5	430								

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

●Frequency coefficient of rated ripple current

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