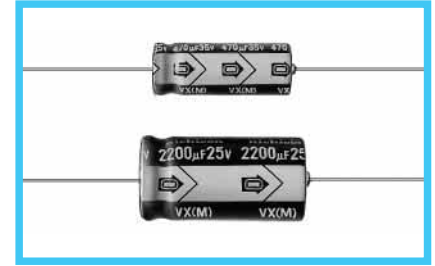


VX Standard, For General Purposes - Axial Lead Type
(02 type) series



Anti-Solvent
Feature
(Through 100V only)

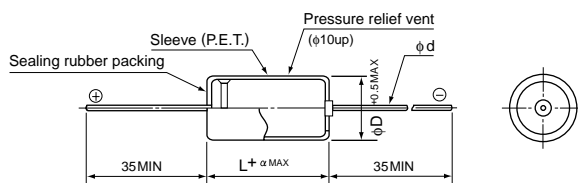
- Axial lead type of standard series for general purposes.



Specifications

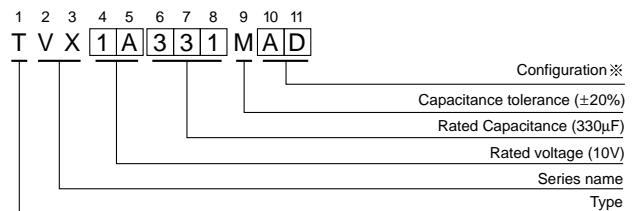
Item	Performance Characteristics																										
Category Temperature Range	-40 ~ +85°C (6.3 ~ 250V), -25 ~ +85°C (315 ~ 450V)																										
Rated Voltage Range	6.3 ~ 450V																										
Rated Capacitance Range	0.47 ~ 10000µF																										
Capacitance Tolerance	±20% at 120Hz, 20°C																										
Leakage Current	Rated voltage (V)	6.3 ~ 100																									
	Leakage current	<p>After 1 minute's application of rated voltage, not more than 0.03CV or 4 (µA), whichever is greater.</p> <p>After 2 minutes' application of rated voltage, not more than 0.01CV or 3 (µA), whichever is greater.</p>																									
tan δ	Rated voltage (V)	160 ~ 450																									
	tan δ (MAX.)	<p>In case of CV ≤ 1000 After 1 minute's application of rated voltage, not more than 0.1CV+40 (µA).</p> <p>In case of CV > 1000 After 1 minute's application of rated voltage, not more than 0.04CV+100 (µA).</p>																									
Stability at Low Temperature	For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF. Measurement frequency : 120Hz, Temperature : 20°C																										
	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63 ~ 100</th> <th>160 ~ 315</th> <th>350 ~ 450</th> </tr> </thead> <tbody> <tr> <td>tan δ (MAX.)</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>	Rated voltage (V)	6.3	10	16	25	35	50	63 ~ 100	160 ~ 315	350 ~ 450	tan δ (MAX.)	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.25						
Rated voltage (V)	6.3	10	16	25	35	50	63 ~ 100	160 ~ 315	350 ~ 450																		
tan δ (MAX.)	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.25																		
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.	Measurement frequency : 120Hz																									
		<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35 ~ 100</th> <th>160 ~ 250</th> <th>315 ~ 350</th> <th>400 ~ 450</th> </tr> </thead> <tbody> <tr> <td>Impedance ratio ZT / Z20 (MAX.)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>15</td> </tr> <tr> <td></td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>12</td> <td>—</td> <td>—</td> </tr> </tbody> </table>	Rated voltage (V)	6.3	10	16	25	35 ~ 100	160 ~ 250	315 ~ 350	400 ~ 450	Impedance ratio ZT / Z20 (MAX.)	4	3	2	2	2	4	6	15		10	8	6	4	3	12
Rated voltage (V)	6.3	10	16	25	35 ~ 100	160 ~ 250	315 ~ 350	400 ~ 450																			
Impedance ratio ZT / Z20 (MAX.)	4	3	2	2	2	4	6	15																			
	10	8	6	4	3	12	—	—																			
Shelf Life	After leaving capacitors under no load at 85°C for 1000 hours, they meet the characteristic requirements at right.	Capacitance change																									
		tan δ																									
Marking	Printed with white color letter on black sleeve.	Leakage current																									
		Capacitance change																									
		tan δ																									
		Leakage current																									

Axial Lead Type



α	(mm)		
	(φD < 10) 1	φD	5 ~ 13
(φD ≥ 10) 2	φd	0.6	0.8

Type numbering system (Example : 10V 330µF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve	Sn-Pb finished leadwire PVC sleeve (containing Pb)
5 ~ 8	AD	AA
10 ~ 18	CD	CA

※ Please contact to us if other configurations are required.

Please refer to page 19, 20, 21 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.

- Dimension table in next page.



■Dimensions

φD×L (mm)

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		
100	101	16 × 41.5	430	16 × 41.5	430	16 × 41.5	430							Case size	Rated ripple

Rated Ripple (mA rms) at 85°C 120Hz

●Frequency coefficient of rated ripple current

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