VZT Series

Features

- 5φ ~ 10φ, 105℃, 2,000 ~ 5000 hours assured
- Low impedance 30 ~ 50% less than VZS series
- Designed for surface mounting on high density PC board
- RoHS Compliance

Marking color: Black

Specifications

Items	Performance
Category Temperature Range	-55℃ ~ +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V
Tanδ (at 120Hz, 20℃)	
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.
Endurance	
Shelf Life Test	Test time: 1,000 hours; other items are the same as those for the Endurance.
Ripple Current & Frequency Multipliers	

Tanδ (at 120Hz, 20℃)

Rated Voltage	6.3	10	16	25	35	50
Tanδ (max)	0.26	0.19	0.16	0.14	0.12	0.10

Low Temperature Characteristics (at 120Hz)

Rated Voltage		6.3	10	16	25	35	50
Impedance Ratio	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2
	Z(-55℃)/Z(+20℃)	8	5	4	3	3	3

Endurance

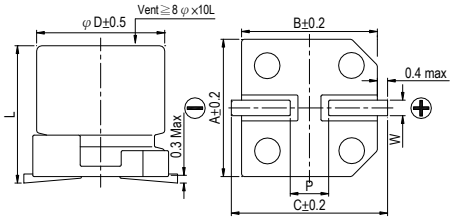
Test Time	2,000 Hrs for φD ≦ 6.3mm ; 5,000 Hrs for φD ≧ 8mm
Capacitance Change	Within ±30% of initial value
Tanδ	Less than 200% of specified value
Leakage Current	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000 ~ 5,000 hours at 105℃.

Ripple Current & Frequency Multipliers

Freq.(Hz) / Cap. (μF)	120	1K	10k	10k up
Under 470	0.65	0.85	0.95	1.00
560 < C < 2200	0.70	0.90	0.95	1.00

Diagram of Dimensions

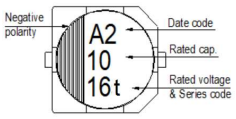


Lead Spacing and Diameter Unit: mm

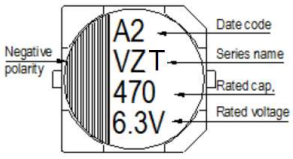
φD	L	A	B	C	W	P ± 0.2
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	10 ± 0.5	8.4	8.4	9.0	0.7 ~ 1.1	3.1
10	10 ± 0.5	10.4	10.4	11	0.7 ~ 1.3	4.7

Marking

φD ≦ 6.3mm



φD = 8 ~ 10 mm



Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 100k Hz, 105℃
Impedance: Ω/ at 100k Hz, 20℃

Dimension & Permissible Ripple Current

V. DC / μF	Contents	6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			50V (1H)		
		ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA
10																	4×5.8 5×5.8	2.30 0.88	85 165
22	220										4×5.8	0.85	160	4×5.8	0.85	160	5×5.8	0.88	165
33	330										4×5.8	0.85	160	5×5.8	0.36	240			
47	470							4×5.8	0.85	160	5×5.8	0.36	240	5×5.8	0.36	240	6.3×5.8	0.68	195
68	680				4×5.8	0.85	160	5×5.8	0.36	240	5×5.8	0.36	240	6.3×5.8	0.26	300			
100	101	4×5.8	0.85	160				5×5.8	0.36	240	6.3×5.8	0.26	300	6.3×5.8	0.26	300	6.3×7.7	0.34	350
150	151				5×5.8	0.36	240	6.3×5.8	0.26	300	6.3×7.7	0.16	600	6.3×7.7	0.16	600			
220	221	5×5.8	0.36	240	6.3×5.8	0.26	300	6.3×5.8	0.26	300	6.3×7.7	0.16	600				8×10	0.18	670
330	331	6.3×5.8	0.26	300	6.3×7.7	0.16	600	6.3×7.7	0.16	600				8×10	0.08	850	10×10	0.12	900
470	471	6.3×7.7	0.16	600	6.3×7.7	0.16	600				8×10	0.08	850						
560	561													10×10	0.06	1,190			
680	681	6.3×7.7	0.16	600				8×10	0.08	850									
820	821										10×10	0.06	1,190						
1,000	102				8×10	0.08	850	10×10	0.06	1,190									
1,500	152	8×10	0.08	850	10×10	0.06	1,190												
2,200	222	10×10	0.06	1,190															

Part Numbering System

VZS series	1500μF	±20%	6.3V	Carrier Tape		8φ×10L	Pb-free and PET coating case
VZT	**152**	**M**	**0J**	**TR**	**-**	**0810**	
Series name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case size	Lead Wire and Coating Type

Note: For more details, please refer to “Part Numbering System (SMD Type)” on page 13.