

Chip Type, 105°C Low Impedance, Large Capacitance Capacitors

- 4φ ~ 18φ, 105°C, 2,000 ~ 5,000 hours assured.
- Large capacitance with ultra low impedance capacitors.
- Designed for surface mounting on high density PC board.



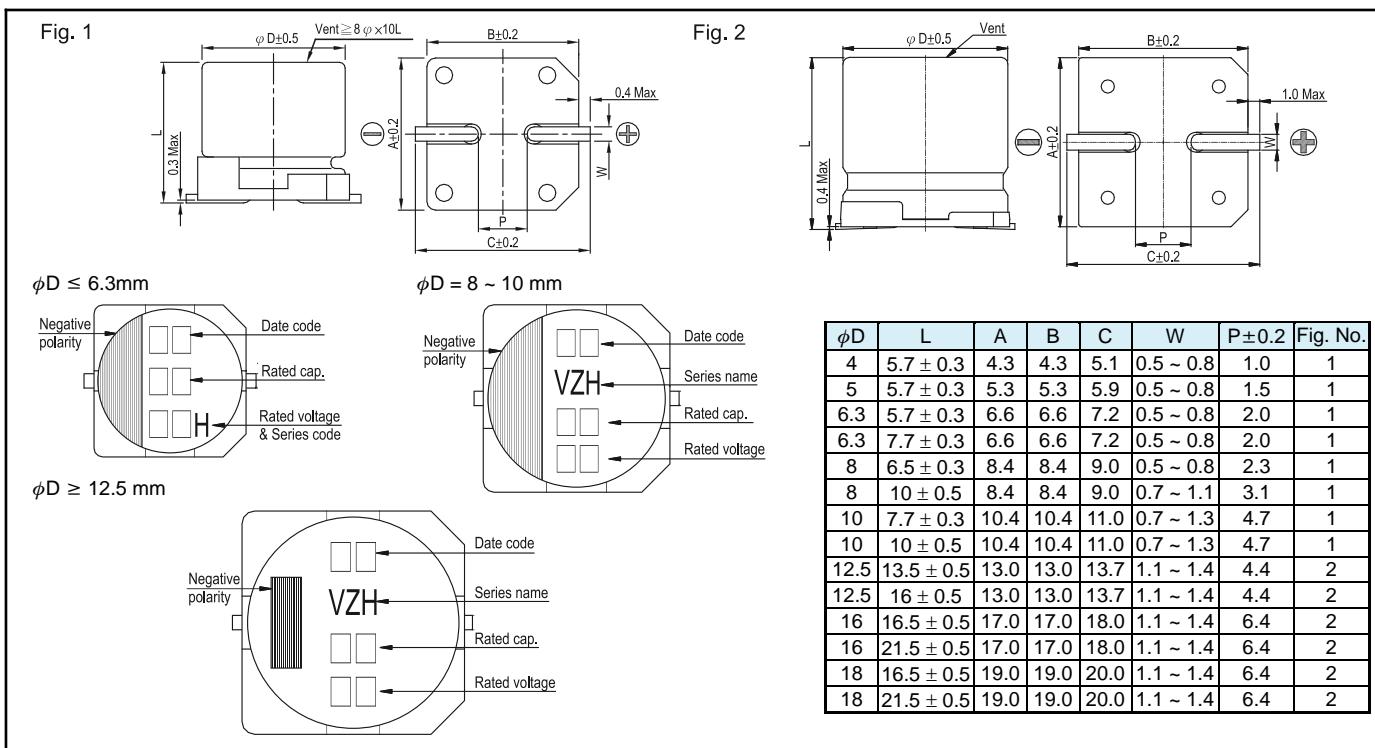
Marking color : Black

■ SPECIFICATIONS

Item	Performance										
Category Temperature Range	-55°C~+105°C										
Capacitance Tolerance	±20% (20°C, 120Hz)										
Leakage Current (μA)	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										
Dissipation Factor (Tanδ at 120Hz, 20°C)	Rated Voltage	6.3	10	16	25	35	50	63	80	100	
	Tanδ (max)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07	
	When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (20°C)										
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.										
	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100	
	Impedance Z (-25°C) / Z (+20°C)	4	3	2	2	2	2	2	2	2	
	Ratio Z (-55°C) / Z (+20°C)	8	5	4	3	3	3	3	3	3	
Endurance (105°C) (Applied ripple current)	Test time	2,000 Hrs for φD≤6.3mm & 8×6.5L & 10φ×7.7L; 5,000 Hrs for φD≥8mm									
	Capacitance Change	Within ±30% of initial value									
	Dissipation Factor	Less than 300% of specified value									
	Leakage Current	Within specified value									
	* The above Specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 ~ 5,000 hours at 105°C.										
Shelf life (105°C)	Test time	1,000 Hrs									
	Capacitance Change	Within ±30% of initial value									
	Dissipation Factor	Less than 300% of specified value									
	Leakage Current	Within specified value									
	* The above Specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied.										
Ripple Current & Frequency Multipliers	Frequency (Hz)	50, 60	120	1k	10k up						
	Multiplier	0.60	0.70	0.85	1.0						

■ OUTLINE DRAWING

Unit : mm



CHIP TYPE Aluminum Electrolytic Capacitors

VZH

■ STANDARD RATINGS

Rated voltage (V)	6.3			10			16			25			35			50		
Item	Case	Impedance	Rated ripple current	Case	Impedance	Rated ripple current												
	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4x5.7 2.9 60
2.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4x5.7 2.9 60
3.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4x5.7 2.9 60
4.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4x5.7 1.35 80	5x5.7 1.52 85	
10	—	—	—	—	—	—	4x5.7	1.35	80	4x5.7	1.35	80	5x5.7	0.80	150	6.3x5.7	0.88	165
22	4x5.7	1.35	80	4x5.7	1.35	80	5x5.7	0.80	150	5x5.7	0.80	150	6.5x5.7	0.44	230	6.3x5.7	0.88	165
33	4x5.7	1.35	80	5x5.7	0.80	150	6.3x5.7	0.44	230	6.3x5.7	0.44	230	6.3x5.7	0.44	230	6.3x7.7	0.68	185
47	5x5.7	0.80	150	6.3x5.7	0.44	230	6.3x7.7	0.68	185									
68	—	—	—	—	—	—	—	—	—	—	—	—	8x6.5	0.36	280	8x10	0.34	369
100	6.3x5.7	0.44	230	6.3x5.7	0.44	230	6.3x5.7	0.44	230	6.3x7.7	0.36	280	8x10	0.17	450	8x10	0.34	369
150	6.3x5.7	0.44	230	6.3x5.7	0.44	230	6.3x7.7	0.36	280	8x6.5	0.36	280	8x10	0.17	450	10x10	0.18	553
220	6.3x7.7	0.36	280	6.3x7.7	0.36	280	6.3x7.7	0.36	280	8x10	0.17	450	10x10	0.09	670	12.5x13.5	0.12	650
330	8x6.5	0.36	280	8x10	0.17	450	8x10	0.17	450	8x10	0.17	450	12.5x13.5	0.070	820	12.5x13.5	0.12	650
470	8x10	0.17	450	10x7.7	0.17	450	10x7.7	0.17	450	10x10	0.09	670	12.5x16	0.060	950	16x16.5	0.073	1000
680	8x10	0.17	450	10x10	0.09	670	10x10	0.09	670	12.5x13.5	0.070	820	12.5x16	0.060	950	16x16.5	0.073	1000
1000	8x10	0.17	450	10x10	0.09	670	12.5x13.5	0.070	820	12.5x16	0.060	950	16x16.5	0.054	1260	18x16.5	0.066	1500
1500	10x10	0.09	670	12.5x13.5	0.070	820	12.5x16	0.060	950	16x16.5	0.054	1260	18x16.5	0.048	1500	16x21.5	0.038	1620
2200	12.5x13.5	0.070	820	12.5x16	0.060	950	16x16.5	0.054	1260	16x16.5	0.054	1260	18x21.5	0.038	1750	—	—	—
3300	12.5x16	0.060	950	16x16.5	0.054	1260	16x16.5	0.054	1260	16x21.5	0.038	1630	18x21.5	0.038	1750	—	—	—
4700	16x16.5	0.054	1260	16x16.5	0.054	1260	18x16.5	0.048	1500	16x21.5	0.038	1630	—	—	—	—	—	—

Rated voltage (V)	63			80			100		
Item	Case	Impedance	Rated ripple current	Case	Impedance	Rated ripple current	Case	Impedance	Rated ripple current
	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms	$\phi D \times L$ (mm)	Ω	mArms
4.7	5x5.7	1.90	70	—	—	—	—	—	—
10	6.3x5.7	1.20	130	—	—	—	—	—	—
22	6.3x7.7	0.90	150	8x10	1.3	130	8x10	1.3	130
33	8x10	0.50	280	8x10	1.3	130	10x10	0.7	200
47	8x10	0.50	280	10x10	0.7	200	10x10	0.7	200
100	10x10	0.25	450	10x10	0.7	200	12.5x13.5	0.32	450
150	12.5x13.5	0.15	700	12.5x13.5	0.32	450	12.5x16	0.26	550
220	12.5x13.5	0.15	700	12.5x16	0.26	550	16x16.5	0.17	650
330	16x16.5	0.082	900	16x16.5	0.17	650	18x16.5	0.15	850
470	16x16.5	0.082	900	18x16.5	0.15	850	16x21.5	0.15	900
680	18x16.5	0.080	1150	18x21.5	0.15	950	—	—	—
1000	18x21.5	0.06	1250	—	—	—	—	—	—

(Note) Rated ripple current : mA/rms at 100kHz, 105°C, Impedance : Ω at 100kHz, 20°C

NOTE

Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.