ELNA — Vertical Chip Type Aluminum Electrolytic Capacitors VZH, VMH series

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

- Compatible with surface mounting, long life capacitors.
- Environmental : GREEN CAP™ , RoHS compliance.
- Supplied with carrier taping.
- Guaranteed 7000 hours at 105°C.
  (φ6.3X5.8L: 5000 hours)

Vibration resistance ⇦ VMH ⇦ VZH ⇦ VVC Long life

Marking color : Black print

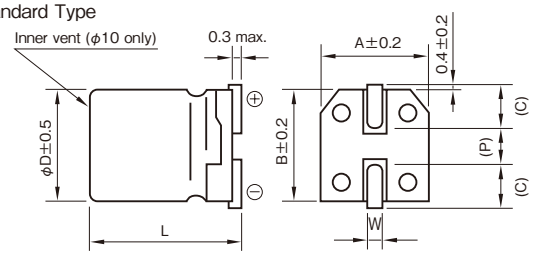
Specifications

Item	Performance
Category temperature range (℃)	−55 to +105
Tolerance at rated capacitance (%)	±20 (20℃,120Hz)
Leakage current (μA) (max.)	0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20℃)
Tangent of loss angle (tanδ)	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 — tanδ (max.): 0.32 / 0.28 / 0.26 / 0.16 / 0.14 (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 — Impedance ratio (max.) Z−25℃/Z+20℃: 2 / 2 / 2 / 2 / 2; Z−40℃/Z+20℃: 3 / 3 / 3 / 3 / 3; Z−55℃/Z+20℃: 4 / 4 / 4 / 4 / 4 (120Hz)
Endurance (105℃) (Applied ripple current)	Test time: 7000 hours (φ6.3×5.8L:5000hours); Leakage current: The initial specified value or less; Percentage of capacitance change: Within ±30% of initial value; Tangent of the loss angle: 300% or less of the initial specified value
Shelf life (105℃)	Test time : 1000hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-4 4.1
Applicable standards	JIS C5101 - 1,- 18 (IEC 60384 - 1,- 18)

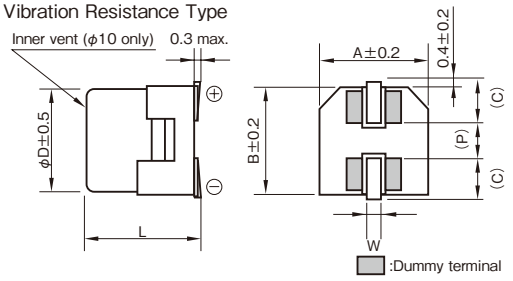
Outline Drawing

Unit : mm

Standard Type



For Vibration Resistance Type



( ): Reference size

φD	L	A	B	C	W	P	Size code
6.3	5.8±0.3	6.6	6.6	2.7	0.5～0.8	2.0	DC8
6.3	7.7±0.3	6.6	6.6	2.7	0.5～0.8	2.0	DE7
8	10±0.5	8.4	8.4	3.0	0.7～1.1	3.1	EH0
10	10±0.5	10.4	10.4	3.3	0.7～1.1	4.7	FH0

Refer to individual page.
(Soldering conditions, Land pattern size, The taping specifications)

Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	120	1k	10k	100k
6.3 to 35	0.50	0.80	0.95	1

Product code system (*For general product)

Standard Type (example : 35V100μF)

RS*	VZH	101	M	1G	DE7	002	U
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

For Vibration Resistance Type (example : 35V330μF)

RS*	VMH	331	M	1G	FH0	002	U
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

For details, refer to the various "Product Code System" pages.

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.

Vertical Chip Type Aluminum Electrolytic Capacitors VZH, VMH series

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

Standard Ratings

Rated voltag(V) / Item / Rated capacitance(μF)	6.3 (1J)				10 (1L)				16 (1E)				25 (1T)			
	Case φD×L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mArms)
33	—	—	—	—	—	—	—	—	—	—	—	—	6.3×5.8	DC8	1.10	140
47	—	—	—	—	—	—	—	—	6.3×5.8	DC8	1.10	140	6.3×5.8	DC8	1.10	140
100	6.3×5.8	DC8	1.10	140	6.3×5.8	DC8	1.10	140	6.3×5.8	DC8	1.10	140	6.3×7.7	DE7	1.00	230
150	6.3×5.8	DC8	1.10	140	6.3×5.8	DC8	1.10	140	6.3×5.8	DC8	1.10	140	8×10	EH0	0.22	600
220	6.3×7.7	DE7	1.00	230	6.3×7.7	DE7	1.00	230	6.3×7.7	DE7	1.00	230	8×10	EH0	0.22	600
330	6.3×7.7	DE7	1.00	230	8×10	EH0	0.22	600	8×10	EH0	0.22	600	8×10	EH0	0.22	600
470	8×10	EH0	0.22	600	8×10	EH0	0.22	600	8×10	EH0	0.22	600	10×10	FH0	0.16	850
									10×10	FH0	0.16	850				
680	10×10	FH0	0.16	850	10×10	FH0	0.16	850	10×10	FH0	0.16	850	—	—	—	—
1000	10×10	FH0	0.16	850	—	—	—	—	—	—	—	—	—	—	—	—

Rated voltag(V) / Item / Rated capacitance(μF)	35 (1G)			
	Case φD×L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mArms)
22	6.3×5.8	DC8	1.10	140
33	6.3×5.8	DC8	1.10	140
	6.3×7.7	DE7	1.00	230
47	6.3×7.7	DE7	1.00	230
100	6.3×7.7	DE7	1.00	230
150	8×10	EH0	0.22	600
220	8×10	EH0	0.22	600
330	10×10	FH0	0.16	850

(Note) Rated ripple current : 105℃ , 100kHz ; ESR : 20℃ , 100kHz

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