PVX

ALUMINUM ELECTROLYTIC CAPACITORS WITH CONDUCTIVE POLYMER SOLID ELECTROLYTE

ELNA®

Chip Type | GREEN CAP | SMD | Low ESR | 105℃ 2000hours | Anti-cleaning solvent

- Super low ESR and high ripple current are realized.
- Guaranteed 105℃, 2000 hours.

High CV Low ESR ⇦ PVX ⇦ High CV Low ESR PVM ⇦ PVH

Marking color : Blue print

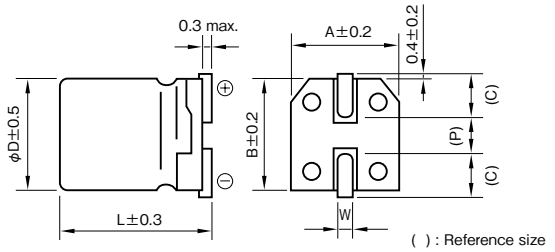
Specifications

Item	Performance
Category temperature range (℃)	−55 to +105
Tolerance at rated capacitance (%)	±20 (20℃,120Hz)
Leakage current (μA) *Note	Less than 0.2CV (after 2 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20℃)
Tangent of the loss angle (tanδ)	Less than 0.12 (20℃,120Hz)
Characteristics at high and low temperature	Impedance ratio (max.): Z−25℃/Z+20℃ 1.15; Z−55℃/Z+20℃ 1.25 (100kHz)
Endurance (105℃) (Applied ripple current)	Test time: 2000 hours; Leakage current: The initial specified value or less; Percentage of capacitance change: Within ±20% of initial value; Tangent of the loss angle: 150% or less of the initial specified value; ESR change: 150% or less of the initial specified value
Bias Humidity 60℃, 90 to 95%RH	Test time: 500 hours; Leakage current: The initial specified value or less; Percentage of capacitance change: Within ±20% of initial value; Tangent of the loss angle: 150% or less of the initial specified value; ESR change: 150% or less of the initial specified value
Characteristics of applied surge voltage	The capacitors shall be subject to 1000 cycles each consisting of charge with the surge voltage specified at 105℃ for 30 seconds through a protective resister (Rc=1kΩ) in 6 minutes per cycle. Surge voltage : 1.15 times of rated voltage. Leakage current: The initial specified value or less; Percentage of capacitance change: Within ±20% of initial value; Tangent of the loss angle: 150% or less of the initial specified value; ESR change: 150% or less of the initial specified value
Failure tare	0.5% per 1000 hours maximum (Confidence level 60% at 105℃)

*Note : If any doubt arises, measure the leakage current after following voltage application treatment.
Voltage application treatment : DC rated voltage are applied to the capacitors for 120 minutes at 105℃.

Outline Drawing

Unit : mm



φD	L	A	B	C	W	P	Casing symbol
5	5.7	5.3	5.3	2.3	0.5 to 0.8	1.5	E60
6.3	5.7	6.6	6.6	2.7	0.5 to 0.8	2.0	F60
8	6.7	8.4	8.4	3.0	0.5 to 0.8	3.1	G70
10	7.7	10.4	10.4	3.3	0.7 to 1.1	4.7	H80

- Soldering conditions are described on page 15.
- Land pattern size are described on page 13.
- The taping specifications are described on page 16.

Part numbering system (example : 4V150μF)

PVX	—	4	V	151	M	E60	E	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	2.5			4			6.3			10		
	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)
100	—	—	—	—	—	—	5×5.7	15	3100	5×5.7	15	3100
120	—	—	—	—	—	—	—	—	—	6.3×5.7	13	3300
150	5×5.7	10	3800	5×5.7	10	3800	5×5.7	15	3100	—	—	—
220	5×5.7	10	3800	5×5.7	10	3800	6.3×5.7	9	4000	8×6.7	10	3800
270	5×5.7	10	3800	—	—	—	—	—	—	—	—	—
330	6.3×5.7	9	4000	6.3×5.7	9	4000	8×6.7	8	4300	8×6.7	10	3800
390	6.3×5.7	9	4000	—	—	—	8×6.7	8	4300	—	—	—
470	8×6.7	8	4300	8×6.7	8	4300	8×6.7	8	4300	10×7.7	10	4000
560	8×6.7	8	4300	8×6.7	8	4300	—	—	—	—	—	—
680	8×6.7	8	4300	10×7.7	8	4600	—	—	—	—	—	—
820	—	—	—	—	—	—	10×7.7	8	4600	—	—	—
1000	10×7.7	8	4600	10×7.7	8	4600	—	—	—	—	—	—
1200	10×7.7	8	4600	—	—	—	—	—	—	—	—	—

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