

VX Conductive Polymer Aluminum Solid Capacitors

+125 °C, High Ripple Current, Low ESR, Series VX.

Features:

- 125 °C、2000 hours assured
- Low ESR with large ripple current, SMT type
- RoHS Compliance

Photo



Marking color: Blue

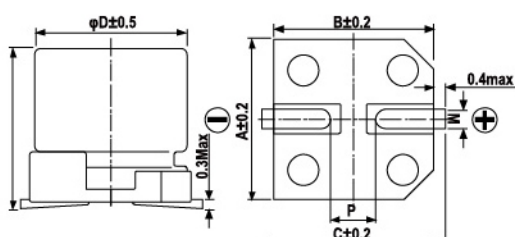
Applications

Suitable for Switching Power Supply, DC/DC Converter, PDP /LCD TV and digital equipment.

Specifications

No.	Item	Performance	
1	Temperature range (°C)	-55 to +125	
2	Leakage current (μA)	Less than 0.2CV or 280 whichever is larger (after two minutes) C: Rated Capacitance(μF); V: Rated voltage(V) 20 °C	
3	Capacitance tolerance (%)	±20 (20 °C, 120Hz)	
4	Tangent of the loss angle (Tanδ)	0.12	20 °C, 120Hz
5	ESR	See Standard Ratings	
6	Temperature Characteristics, ESR Ratio	At -55 °C 100KHz(Low Temperature)	$Z_{-55°C}/Z_{+20°C} \leq 1.25$
		At +125 °C 100KHz(High Temperature)	$Z_{+125°C}/Z_{+20°C} \leq 1.25$
7	Endurance (+125 °C 2000hours Rated voltage Applied)	Test time	2000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
8	Humidity Test (+60 °C 90% to 95% RH 1000 hours No applied voltage)	Test time	1000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
9	Surge Voltage Test (At normal temperature, charge at surge voltage for 30 second and discharge via a 1KΩ protective resistor for 330 second. Repeat for 1000cycles)	Test time	1000 cycles
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
10	Applicable standards	JIS-C-5101-4	

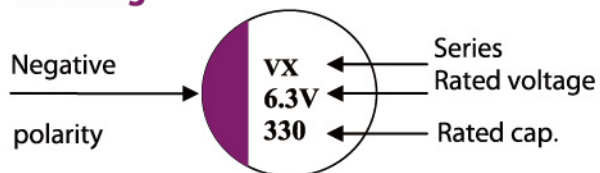
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

øD	L	A	B	C	W	P±0.2
8	7.0±0.5	8.4	9.0	9.0	0.7~1.1	3.1
8	12.0±0.5	8.4	8.4	9.0	0.7~1.1	3.1
10	10.5±0.5	10.4	10.4	11.0	0.7~1.3	4.7
10	12.6+0.2/-0.4	10.4	10.4	11.0	0.7~1.3	4.7

Marking



Frequency Coefficient for Ripple Current

Frequency (Hz)	$120 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F < 500K$
Coefficient	0.05	0.3	0.7	1

Dimension & Permissible Ripple Current

Dimension: $\Phi \times L$ (mm)
Ripple Current: mA/rms at 100KHz

V.DC Contents μF	2.5V				4V			
	$\Phi \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)	$\Phi \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)
100					6.3X6	20	840	2100
220	6.3X6	20	840	2100	6.3X6	20	840	2100
330	6.3X6	20	840	2100	8X7	18	1000	2500
560	8X7	18	1240	3100	8X7	18	1520	3800
680	8X7	18	1455	3500	8X12	14	1520	4600
820	8X12	14	1455	4600	8X12	14	1520	4600
1000	8X12	14	1455	4600	8X12	14	1520	4600
1200	8X12	14	1455	4600	10X10.5	14	1520	4600
	10X10.5	14	1455	4600	10X12.6	14	2128	5320
1500	8X12	14	1455	4600	10X10.5	14	1520	4600
	10X12.6	14	2128	5320	10X12.6	14	2128	5320
1800	10X12.6	14	2128	5320				

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Dimension & Permissible Ripple Current

Dimension: $\Phi D \times L$ (mm)
Ripple Current: mA/rms at 100KHz

V.DC Contents μF	6.3V				10V			
	$\Phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)	$\Phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)
100	6.3X6	24	840	2100				
220	6.3X6	24	840	2100				
330	8X7	18	1120	2800	8X7	18	1120	2800
390	8X7	18	1120	2800	8X12	14	1520	3800
470	8X7	18	1120	2800	8X12	14	1840	4600
560	8X7	18	1120	2800	8X12	14	1840	4600
	8X12	14	1840	4600	10X10.5	14	1840	4600
680	8X12	14	1840	4600	10X10.5	14	1840	4600
	10X10.5	14	1840	4600	10X12.6	14	1680	5320
1000	10X12.6	14	1680	5320	10X12.6	14	1680	5320
1500	10X12.6	14	1680	5320	10X12.6	14	1680	5320
1800	10X12.6	14	1680	5320				

V.DC Contents μF	16V				25V			
	$\Phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)	$\Phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)
100					8X7	40	793	2380
220	8X7	25	950	2850	8X12	28	1400	3500
330	8X12	20	1500	4500	10X10.5	28	1417	4250
470	8X12	20	1500	4500	10X12.6	28	1417	4250
680	10X10.5	20	1500	4500				
820	10X12.6	14	1680	5320				

V.DC Contents μF	35V			
	$\Phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C <T \leq 125 °C)	Ripple Current (mA/rms, T \leq 105 °C)
56	56	56	767	2300
100	100	100	983	2900
150	150	150	983	2900
220	220	220	1520	3800