

VN Chip Type Aluminum Electrolytic Capacitors

Features

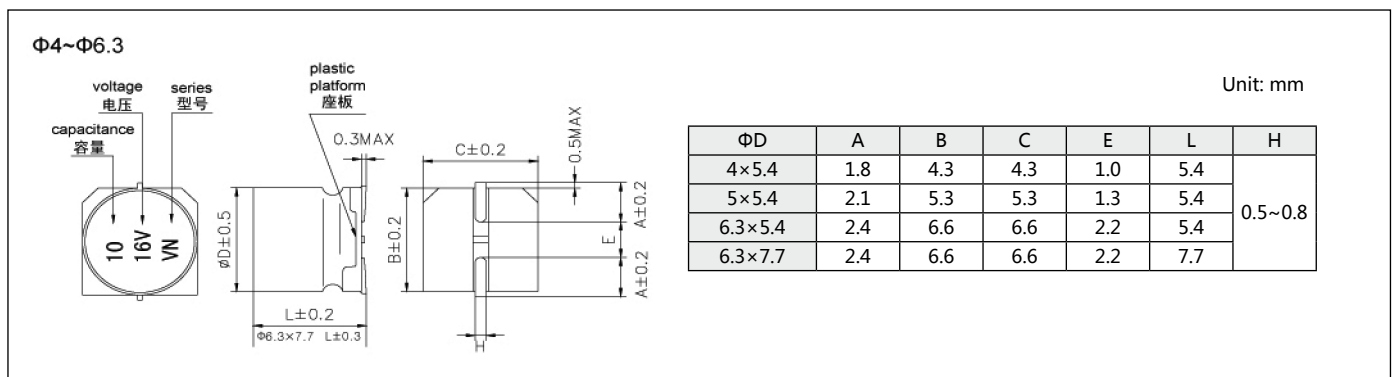
- Bi-polar.
- Reflow soldering is available.
- Available for high density surface mounting.
- Adapted to the RoHS directive.



Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40°C ~ +85°C																					
Rated Voltage Range	6.3~50V																					
Nominal Capacitance Range	0.1~100μF																					
Nominal Capacitance Tolerance	±20%(+20°C, 120Hz)																					
Leakage Current	$I \leq 0.01C_R U_R$ or 10(μA), Whichever is greater (at 20°C, after 2 minutes) C _R : Nominal capacitance(μF), U _R : Rated voltage(V)																					
Dissipation Factor(Max) (tgδ, +20°C, 120Hz)	<table border="1"> <tr> <td>U_R(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tgδ</td> <td>0.26</td> <td>0.22</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.18</td> </tr> </table>	U _R (V)	6.3	10	16	25	35	50	tgδ	0.26	0.22	0.20	0.20	0.20	0.18							
	U _R (V)	6.3	10	16	25	35	50															
tgδ	0.26	0.22	0.20	0.20	0.20	0.18																
Load Life	After 1000 hours' application of rated voltage at 85°C, with the polarity inverted every 250 hours, the capacitor shall meet the following requirement: <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial value</td> </tr> <tr> <td>Dissipation factor</td> <td>Not more than 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the initial specified value</td> </tr> </table>	Capacitance change	Within ±20% of the initial value	Dissipation factor	Not more than 200% of the initial specified value	Leakage current	Not more than the initial specified value															
Capacitance change	Within ±20% of the initial value																					
Dissipation factor	Not more than 200% of the initial specified value																					
Leakage current	Not more than the initial specified value																					
Shelf Life	After storage for 1000 hours at 105°C, the capacitors shall meet the requirement of load life above.																					
Low Temperature Stability Impedance Ratio(120Hz)	<table border="1"> <tr> <td>U_R(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Z-25°C / +20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / +20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>	U _R (V)	6.3	10	16	25	35	50	Z-25°C / +20°C	4	3	2	2	2	2	Z-40°C / +20°C	8	6	4	4	3	3
	U _R (V)	6.3	10	16	25	35	50															
	Z-25°C / +20°C	4	3	2	2	2	2															
Z-40°C / +20°C	8	6	4	4	3	3																
Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement: <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±10% of the initial value</td> </tr> <tr> <td>Dissipation factor</td> <td>Not more than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the initial specified value</td> </tr> </table>	Capacitance change	Within ±10% of the initial value	Dissipation factor	Not more than the initial specified value	Leakage current	Not more than the initial specified value															
Capacitance change	Within ±10% of the initial value																					
Dissipation factor	Not more than the initial specified value																					
Leakage current	Not more than the initial specified value																					

Diagram of Dimensions



Nominal capacitance, rated voltage, rated ripple current and case size table

V Item Cap.(μF)	6.3		10		16		25		35		50	
	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)
0.1											4×5.4	2.3
0.22											4×5.4	3.3
0.33											4×5.4	4.1
0.47											4×5.4	4.9
1.0											4×5.4	8.4
2.2									4×5.4	10	5×5.4	13
3.3							4×5.4	13	5×5.4	17	5×5.4	17
4.7					4×5.4	14	5×5.4	20	5×5.4	21	6.3×5.4	20
10			4×5.4	18	5×5.4	26	6.3×5.4	35	6.3×5.4	35	6.3×7.7	36
22	5×5.4		6.3×5.4	40	6.3×5.4	45	6.3×7.7	50	6.3×7.7	54		
33	6.3×5.4		6.3×5.4	50	6.3×5.4	55	6.3×7.7	61				
47	6.3×5.4		6.3×7.7	61	6.3×7.7	75						
100	6.3×7.7											

I~ =Rated ripple current (mA) (85° C ,120Hz)

Frequency coefficient of ripple current

Frequency(Hz)	50Hz	120Hz	300Hz	1kHz	≥ 10KHz
Coefficient	0.70	1.00	1.17	1.36	1.50