

NV Series

Features

- ◆ 85°C Non-polarized
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ RoHS Compliant



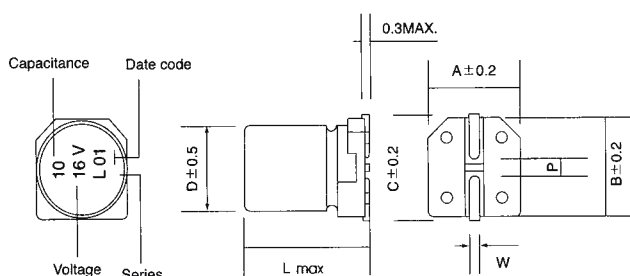
Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40~ +85°C																					
Rated Voltage Range	6.3~50 VDC																					
Capacitance Range	0.1 to 560 μ F																					
Capacitance Tolerance	$\pm 20\%$ (120Hz,+20°C)																					
Leakage Current (+20°C,max.)	0.05 CV or 10 (μ A) After 2 minutes, whichever is greater measured with rated working voltage applied																					
Dissipation Factor ($\tan \delta$, at 20°C , 120Hz)	<table border="1"> <tr> <td>Rated voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>D.F. (%) max.</td> <td>24</td> <td>20</td> <td>17</td> <td>17</td> <td>15</td> <td>15</td> </tr> </table>	Rated voltage(VDC)	6.3	10	16	25	35	50	D.F. (%) max.	24	20	17	17	15	15							
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Low Temperature Characteristics (at 120Hz)	Impedance ratio max																					
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Z-25°C / Z+20°C	4	3	2	2	2	2																
Z-40°C / Z+20°C	8	6	4	3	3	3																
Endurance	Test conditions Duration time :2000 Hrs Ambient temperature :+85°C Applied voltage :Rated DC working voltage After test requirement at +20°C: Capacitance change :Within $\pm 25\%$ of the initial value Dissipation factor :Not more than 200% of specified value Leakage current :Not more than the specified value																					
Shelf Life	Test conditions Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :None After test requirement at +20°C : Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					
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 characteristic requirements listed under.																					
	<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within $\pm 10\%$ of initial value</td> </tr> <tr> <td>$\tan \delta$</td> <td>Less than specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 10\%$ of initial value	$\tan \delta$	Less than specified value															
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Multiplier for Ripple Current vs. Frequency

Frequency(Hz)	60(50)	120	500	1K	$\geq 10K$
Multiplier	0.8	1.0	1.20	1.30	1.50

Diagram of Dimensions:(unit:mm)



ϕ D	L	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5

Case Size

φ DxL(mm)

WV Cap(μF)	6.3		10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											4X5.5	1.0
0.22											4X5.5	2.0
0.33											4X5.5	2.8
0.47											4X5.5	4.0
1											4X5.5	8.4
2.2									4X5.5	8.4	4X5.5	13
											5X5.5	13
3.3					4X5.5	12	4X5.5	12	4X5.5	16	4X5.5	17
							5X5.5	12	5X5.5		16	5X5.5
4.7					4X5.5	12	4X5.5	16	4X5.5	18	5X5.5	20
							5X5.5	16	5X5.5		18	6.3X5.5
10	4X5.5	15	4X5.5	17	4X5.5	23	5X5.5	27	6.3X5.5	29	6.3X5.5	32
					5X5.5		23	6.3X5.5			27	
22	4X5.5	28	5X5.5	33	5X5.5	37	6.3X5.5	40	6.3X5.5	45	8X10.5	60
	5X5.5	32	6.3X5.5	37	6.3X5.5							
33	5X5.5	37	6.3X5.5	41	6.3X5.5	49	6.3X7.7	51	8X10.5	58	10X10.5	75
							8X6.5	55				
47	6.3X5.5	45	6.3X5.5	50	6.3X7.7	51	6.3X7.7	56	8X10.5	64	10X10.5	100
							8X6.5	55				
100	6.3X7.7	65	6.3X7.7	75	8X10.5	100	8X10.5	130				
	8X6.5	70	8X6.5	80								
220	8X10.5	120	8X10.5	150	10X10.5	170						
330	8X10.5	160	10X10.5	180								
470	10X10.5	190										
560	10X10.5	220										

Ripple Current (mA, rms) at 85°C 120Hz