

NV Series

Features

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



Specifications

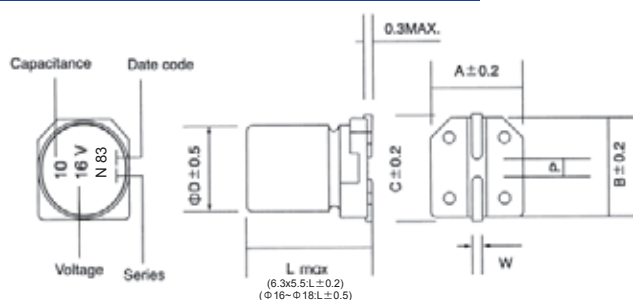
Item	Performance Characteristics						
Operating Temperature Range	-40~ +85°C						
Rated Voltage Range	6.3~50 VDC						
Capacitance Range	0.1 to 560 μF						
Capacitance Tolerance	±20%(120Hz,+20°C)						
Leakage Current (+20°C,max.)	0.05 CV or 10 (μA) After 2 minutes, whichever is greater measured with rated working voltage applied						
Dissipation Factor (tan δ , at 20°C , 120Hz)	Working voltage(VDC)	6.3	10	16	25	35	50
	D.F.(%)max	24	20	17	17	15	15
Low Temperature Characteristics (at 120Hz)	Impedance ratio max						
	Rated voltage(VDC)	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	4	3	2	2	2	2
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 ±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.						
	Leakage current	Less than specified value					
	Capacitance change	Within ±10% of initial value					
	tan δ	Less than specified value					

Multiplier for Ripple Current vs. Frequency

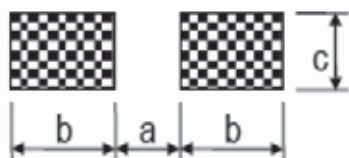
Frequency(Hz)	60(50)	120	500	1K	≥ 10K
Multiplier	0.8	1.0	1.20	1.30	1.50

φD	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	6.1	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
12.5	14	13.0	13.0	13.9	1.0~1.4	4.5
16	17	17.0	17.0	18.0	1.0~1.4	6.6
16	21.5	17.0	17.0	18.0	1.0~1.4	6.6
18	16.5	19.0	19.0	20.0	1.0~1.4	6.6
18	21.5	19.0	19.0	20.0	1.0~1.4	6.6

Diagram of Dimensions:(unit:mm)



Recommended land pattern:(unit:mm)



Φ DxL	a	b	c
4xall	1	2.6	1.6
5xall	1.4	3	1.6
6.3xall	2.1	3.5	1.6
8xL(height ≤6.5)	2.1	4.5	1.6
8xL(height >6.5)	2.8	4.2	1.9
10xall	4.3	4.4	1.9
12.5xall	4.3	5.8	2.5
16xall	6	6.5	3.5
18xall	6	7.5	3.5

Case Size

WV (Vdc)	Cap (μF)	Size (mm)	Rated Ripple current (mA _{rms} /85°C /120Hz)
6.3	10	4x5.5	15
6.3	22	4x5.5	28
6.3	22	5x5.5	32
6.3	33	5x5.5	37
6.3	47	6.3x5.5	45
6.3	100	6.3x7.7	65
6.3	100	8x6.5	70
6.3	220	8x10.5	120
6.3	330	8x10.5	160
6.3	470	10x10.5	190
6.3	560	10x10.5	220
10	10	4x5.5	17
10	22	5x5.5	33
10	22	6.3x5.5	37
10	33	6.3x5.5	41
10	47	6.3x5.5	50
10	100	6.3x7.7	75
10	100	8x6.5	80
10	220	8x10.5	150
10	330	10x10.5	180
16	3.3	4x5.5	12
16	4.7	4x5.5	12
16	10	4x5.5	23
16	10	5x5.5	23
16	22	5x5.5	37
16	22	6.3x5.5	37
16	33	6.3x5.5	49
16	47	6.3x7.7	51
16	47	8x6.5	55
16	100	8x10.5	100
16	220	10x10.5	170
25	3.3	4x5.5	12
25	3.3	5x5.5	12
25	4.7	4x5.5	16

WV (Vdc)	Cap (μF)	Size (mm)	Rated Ripple current (mA _{rms} /85°C /120Hz)
25	4.7	5x5.5	16
25	10	5x5.5	27
25	10	6.3x5.5	27
25	22	6.3x5.5	40
25	33	6.3x7.7	51
25	33	8x6.5	55
25	47	6.3x7.7	56
25	47	8x6.5	60
25	100	8x10.5	130
35	2.2	4x5.5	8.4
35	3.3	4x5.5	16
35	3.3	5x5.5	16
35	4.7	4x5.5	18
35	4.7	5x5.5	18
35	10	6.3x5.5	29
35	22	6.3x5.5	45
35	33	8x10.5	58
35	47	8x10.5	64
50	0.1	4x5.5	1
50	0.22	4x5.5	2
50	0.33	4x5.5	2.8
50	0.47	4x5.5	4
50	1	4x5.5	8.4
50	2.2	4x5.5	13
50	2.2	5x5.5	13
50	3.3	4x5.5	17
50	3.3	5x5.5	17
50	4.7	5x5.5	20
50	4.7	6.3x5.5	20
50	10	6.3x5.5	32
50	22	8x10.5	60
50	33	10x10.5	75
50	47	10x10.5	100