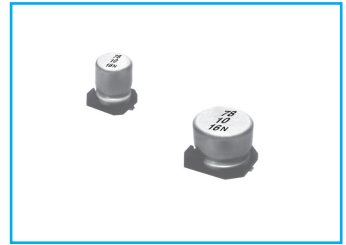


## NC Chip type, Non-polarized Series

**NP** Non-polarized      **S** Solvent Proof



- Chip type with 5.5mmL height
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive

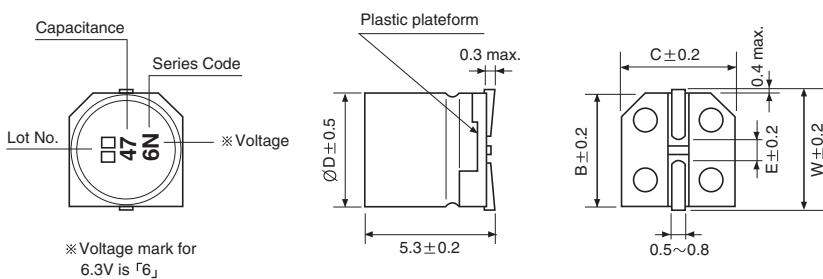


Item	Characteristics
Operating temperature range	-40 ~ +85°C
Leakage current max.	$I = 0.05CV$ or $10\mu A$ whichever is greater (after 2 minutes)
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C
Dissipation factor max. (at 120Hz, 20°C)	WV      6.3      10      16      25      35      50
	tan $\delta$ 0.24      0.20      0.17      0.17      0.15      0.15
Low temperature characteristics (Impedance ratio at 120Hz)	WV      6.3      10      16      25      35      50
	Z-25°C/Z+20°C      4      3      2      2      2      2
	Z-40°C/Z+20°C      8      6      4      4      3      3
Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current      Less than specified value
	Capacitance change      Within $\pm 20\%$ of initial value
	tan $\delta$ Less than 200% of specified value
	Test method      Polarity reverse each 250 hours
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and tan $\delta$ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4
Resistance to soldering heat	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.
	Leakage current      Less than specified value
	Capacitance change      Within $\pm 10\%$ of initial value
	tan $\delta$ Less than specified value

### DRAWING

Unit : mm

-Series code of NC is "N"



$\phi D$	W	B	C	E
4	4.8	4.3	4.3	1.0
5	5.8	5.3	5.3	1.4
6.3	7.1	6.6	6.6	2.2

### DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$	WV	6.3	10	16	25	35	50
1.0							4×5.3    8.4
2.2						4×5.3    8.4	5×5.3    13
3.3					5×5.3    12	5×5.3    16	5×5.3    17
4.7				4×5.3    12	5×5.3    16	5×5.3    18	6.3×5.3    20
10			4×5.3    17	5×5.3    23	6.3×5.3    27	6.3×5.3    29	
22	5×5.3    28	6.3×5.3    33	6.3×5.3    37				
33	6.3×5.3    37	6.3×5.3    41	6.3×5.3    49				
47	6.3×5.3    45						

Ripple current (mA rms) at 85°C, 120Hz  
 Case size  $\phi D \times L$  (mm)