NPCAP™-PNA Series

- Super low ESR and high heat resistance have been obtained by using conductive polymer as electrolyte.
- Rated voltage range : 2.5 to 16Vdc, Capacitance : 100 to 560μF
- Case size : φ 6.3×6.7L
- Solvent resistant type
- RoHS Compliant
- Halogen Free

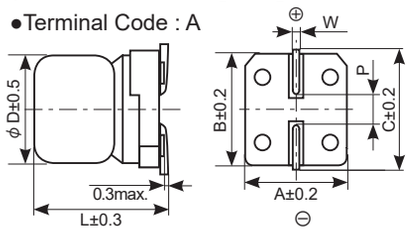
◆ SPECIFICATIONS

Items	Characteristics
Category Temperature Range	-55 to +125℃
Rated Voltage Range	2.5 to 16Vdc
Capacitance Tolerance	±20% (M) (at 20℃ , 120Hz)
Leakage Current	Shall not exceed values shown in STANDARD RATINGS. (at 20℃ after 2 minutes)
Dissipation Factor (tan δ)	0.12 max. (at 20℃ , 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25℃) / Z(+20℃) ≦ 1.15 Z(-55℃) / Z(+20℃) ≦ 1.25 (at 100kHz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 12,000 hours at 125℃ . Appearance: No significant damage Capacitance change: ≦ ±20% of the initial value DF (tan δ): ≦ 200% of the initial specified value ESR: ≦ 200% of the initial specified value Leakage current: ≦ The initial specified value
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to the DC rated voltage at 85℃ , 85% RH for 1,000 hours. Appearance: No significant damage Capacitance change: ≦ ±30% of the initial value DF (tan δ): ≦ 200% of the initial specified value ESR: ≦ 200% of the initial specified value Leakage current: ≦ The initial specified value
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 125℃ for 30 seconds through a protective resistor(R=1kΩ)and discharge for 5 minutes 30 seconds. Rated voltage (Vdc): 2.5 / 6.3 / 16 Surge voltage (Vdc): 2.9 / 7.2 / 18 Appearance: No significant damage Capacitance change: ≦ ±20% of the initial value DF (tan δ): ≦ 150% of the initial specified value ESR: ≦ 150% of the initial specified value Leakage current: ≦ The initial specified value
Soldering Heat	The following specifications shall be satisfied when the solder temperature is reduced back to 20°C to measure dip resistance after soldering has been performed under the recommended soldering conditions. Appearance: No significant damage Capacitance value: Within the specified tolerance range D.F. (tanδ): ≦ The initial specified value ESR: ≦ The initial specified value Leakage current: ≦ The initial specified value (Voltage treatment)

*Note : If any doubt arises, measure the leakage current after the following voltage treatment.
Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 125℃ .

◆ DIMENSIONS [mm]

●Terminal Code : A



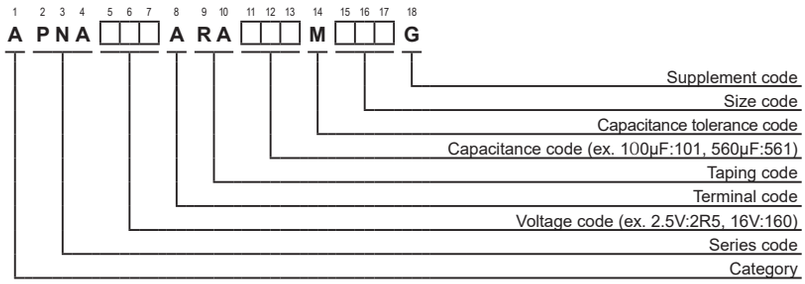
Size Code	φ D	L	A	B	C	W	P
F70	6.3	6.7	6.6	6.6	7.2	0.5 to 0.8	1.9

◆ MARKING

EX) 16V100μF

NPCAP™-PNA Series

◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size code	Leakage current (μA max./ after 2min.)	ESR (mΩ max./20℃ , 100k to 300kHz)	Rated ripple current (mArms/ 125℃ , 100kHz)	Part No.
2.5	560	F70	700	15	1,300	APNA2R5ARA561MF70G
6.3	330	F70	700	15	1,300	APNA6R3ARA331MF70G
16	100	F70	320	25	1,000	APNA160ARA101MF70G

◆ RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	120	1k	10k	50k	100k to 500k
Chip type	0.05	0.30	0.55	0.70	1.00