NPCAP™-PXS Series

- Super low ESR, high ripple current capability
- Longer life (20,000 hours at 105℃)
- Rated voltage range : 4 to 16Vdc, Capacitance range : 39 to 560µF
- Suitable for DC-DC converters, voltage regulators and decoupling applications for computer motherboards etc.
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free

◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	-55 to +105℃
Rated Voltage Range	4 to 16Vdc
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Leakage Current *Note	I=0.2CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (Vdc) (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 20,000 hours at 105℃.

Appearance	No significant damage
Capacitance change	≦±20% of the initial value
D.F. (tan δ)	≦150% of the initial specified value
ESR	≦150% 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 60℃, 90 to 95% RH for 1,000 hours.

Appearance	No significant damage
Capacitance change	≦±20% of the initial value
D.F. (tan δ)	≦150% of the initial specified value
ESR	≦150% 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 105℃ for 30 seconds through a protective resistor(R=1kΩ)and discharge for 5 minutes 30 seconds.

Rated voltage (Vdc)	4.0	6.3	10	16
Surge voltage (Vdc)	4.6	7.2	12	18

Appearance	No significant damage
Capacitance change	≦±20% of the initial value
D.F. (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.

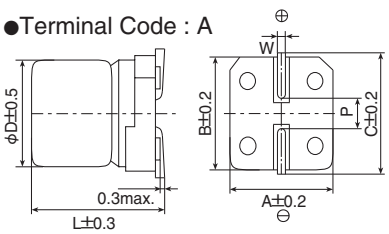
Appearance	No significant damage
Capacitance value	Within the specified tolerance range
D.F. (tan δ)	≦The initial specified value
ESR	≦The initial specified value
Leakage current	≦The initial specified value (Voltage treatment)

Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105℃)

*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 105℃.

◆DIMENSIONS [mm]

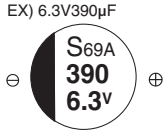
●Terminal Code : A



Size Code	φD	L	A	B	C	W	P
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
H70	8.0	6.7	8.3	8.3	9.0	0.7 to 1.1	3.1

◆MARKING

EX) 6.3V390µF



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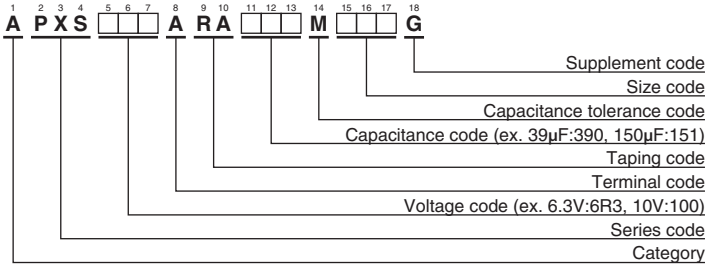
◆PART NUMBERING SYSTEM



Please refer to "Product code guide (conductive polymer type)"

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size code	ESR (mΩ max./20℃, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
4	560	H70	22	3,220	APXS4R0ARA561MH70G
6.3	120	F61	22	2,570	APXS6R3ARA121MF61G
	220	F61	22	2,570	APXS6R3ARA221MF61G
	390	H70	22	3,220	APXS6R3ARA391MH70G
10	120	F61	27	2,320	APXS100ARA121MF61G
	150	H70	30	2,760	APXS100ARA151MH70G
16	39	F61	37	2,050	APXS160ARA390MF61G
	68	F61	30	2,200	APXS160ARA680MF61G
	82	H70	30	2,760	APXS160ARA820MH70G
	120	H70	27	2,900	APXS160ARA121MH70G

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

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