PXN

PX1

Higher ripple

NPCAP[™]-**PXT**Series

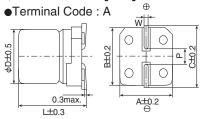
- Super low ESR, impedance and high heat resistance have been obtained by using conductive polymer as electrolyte.
- ●High moisture resistance, Bias Humidity: 1,000 hours at 85℃, 85%RH
- \blacksquare Rated voltage range: 2.5 to $16V_{dc},$ Capacitance range: 100 to $820\mu F$
- Case size range : ϕ 5×5.8L to ϕ 6.3×7.7L
- Suitable for DC-DC converters, voltage regulators and decoupling applications used on 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	2.5 to 16V _{dc}								
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)								
Leakage Current *Note	Shall not exceed values shown in STANDARD RATINGS. (at 20°C after 2 minutes)								
Dissipation Factor $(\tan \delta)$	0.12 max. (at 20°C, 120Hz)								
Low Temperature Characteristics (Max. Impedance Ratio)	$Z(-25^{\circ}C)/Z(+20^{\circ}C) \le 1.15$ $Z(-55^{\circ}C)/Z(+20^{\circ}C) \le 1.25$ (at 100kb								
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 15,000 hour at 105°C.								
	Appearance	No signi	ficant dam	age					
	Capacitance change	$\leq \pm 20\%$	of the init	tial value					
	D.F. (tan δ)	≦150%	of the initia	al specified	d value				
	ESR	≦150%	of the initia	al specified	d value				
	Leakage current	≦The in	itial specif	ied value					
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 85°C85% RH for 1,000 hours.								
	Appearance No significant damage								
	Capacitance change $\leq \pm 30\%$ of the initial value								
	D.F. (tan δ)	\leq 200% of the initial specified value							
	ESR	≦200% of the initial specified value			d 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 through a protective resistor ($R=1k\Omega$) and discharge for 5 minutes 30 seconds.								
	Rated voltage (Vdc)	2.5	4.0	6.3	10	16			
	Surge voltage (Vdc)	2.9	4.6	7.2	12	18			
						I			
	Appearance No significant damage								
	Capacitance change								
	D.F. (tan δ)	≦150% of the initial specified value							
ESR ≦150% of the initial specified value				d value					
	Leakage current		itial specif						
Soldering Heat	The following specifications shall be satisfied when the solder temperature is reduced back to 20°C after soldering has been performed under the recommended soldering conditions.								
		T							
	Appearance	No significant damage							
	Capacitance value								
	D.F. (tan δ)	≦The initial specified value							
	ESR	≦The initial specified value							
	Leakage current	ent ≦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 105°C.

DIMENSIONS [mm]



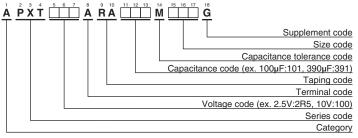
Size Code	φD	L	Α	В	С	W	Р
E61	5	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9

Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.





♦PART NUMBERING SYSTEM



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

♦STANDARD RATINGS

WV (Vdc)	Cap (µF)	Size code	Leakage current (µA max./after 2min.)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
	330	E61	700	26	2,350	APXT2R5ARA331ME61G
	390	E61	700	26	2,350	APXT2R5ARA391ME61G
2.5	390	F61	700	26	2,600	APXT2R5ARA391MF61G
	560	F61	700	26	2,600	APXT2R5ARA561MF61G
	820	F80	1,020	22	2,850	APXT2R5ARA821MF80G
	270	E61	700	26	2,350	APXT4R0ARA271ME61G
4	330	F61	700	26	2,600	APXT4R0ARA331MF61G
4	390	F61	780	26	2,600	APXT4R0ARA391MF61G
	680	F80	1,360	22	2,850	APXT4R0ARA681MF80G
	150	E61	700	26	2,350	APXT6R3ARA151ME61G
	220	E61	700	26	2,350	APXT6R3ARA221ME61G
6.3	220	F61	700	26	2,600	APXT6R3ARA221MF61G
	330	F61	1,030	26	2,600	APXT6R3ARA331MF61G
	560	F80	1,760	22	2,850	APXT6R3ARA561MF80G
	120	E61	700	45	2,000	APXT100ARA121ME61G
10	220	F61	1,100	40	2,200	APXT100ARA221MF61G
	390	F80	1,950	22	2,850	APXT100ARA391MF80G
	100	E61	800	45	2,000	APXT160ARA101ME61G
16	180	F61	1,440	40	2,200	APXT160ARA181MF61G
	270	F80	2,160	22	2,850	APXT160ARA271MF80G

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♦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

CHEMI-CON CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS Product Guide

- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.

Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.

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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

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Part Numbering System Part Numbering System (Appendix) Standardization Available Items by Manufacturing Locations Environmental Measures Technical Note Precautions and Guidelines Recommended Soldering Conditions Taping, Lead-preforming, Terminal and Packaging Options