NPCAP™-PXG Series Upgrade!

- Super low ESR, high ripple current capability
- Rated voltage range : 16 to 25Vdc, Capacitance range : 22 to 1,000µF
- Case size : φ5×5.8L to φ10×12.2L
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free

PXG
↑ Downsized
PXE

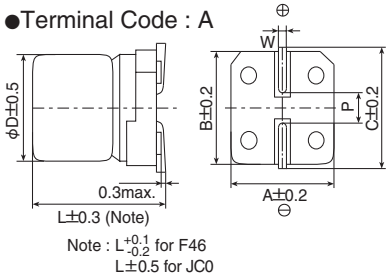
◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	-55 to +105℃
Rated Voltage Range	16 to 25Vdc
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Leakage Current *Note	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 15,000 hours (F46 : 3,000 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 (F46 : 500 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) : 16 / 20 / 25
	Surge voltage (Vdc) : 18 / 23 / 29
	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 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)

*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



Note : $L^{+0.1}_{-0.2}$ for F46
L±0.5 for JC0

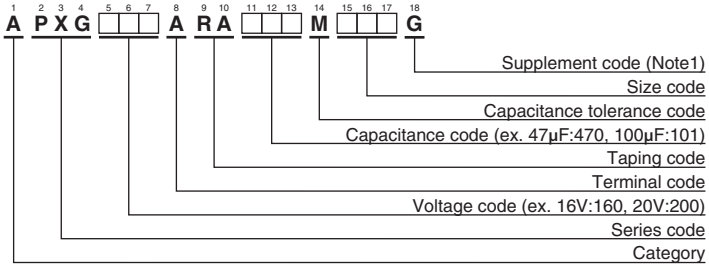
Size Code	φD	L	A	B	C	W	P
E61	5	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F46	6.3	4.5	6.6	6.6	7.2	0.5 to 0.8	1.9
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
H70	8	6.7	8.3	8.3	9.0	0.7 to 1.1	3.1
J80	10	7.7	10.3	10.3	11.0	0.7 to 1.1	4.5
JC0	10	12.2	10.3	10.3	11.0	0.7 to 1.1	4.5

◆MARKING

EX) 25V47µF

NPCAP™-PXG Series (Upgrade!)

◆PART NUMBERING SYSTEM



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

(Note1) : PXG Series 16V68μF (ESR 20mΩ max.) and 16V82μF (ESR 20mΩ max.) have supplement code "J". Terminal and terminal plating are the same as all other in PXG series.

◆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/105℃, 100kHz)	Part No.
16	68	F46	544	20	3,200	APXG160ARA680MF46J
	68	F46	544	40	2,450	APXG160ARA680MF46G
	82	F46	656	20	3,200	APXG160ARA820MF46J
	82	F46	656	40	2,450	APXG160ARA820MF46G
	100	E61	320	27	3,000	APXG160ARA101ME61G
	180	F61	576	22	3,300	APXG160ARA181MF61G
	220	F80	704	22	3,300	APXG160ARA221MF80G
	270	H70	864	22	3,300	APXG160ARA271MH70G
	330	H70	1,050	22	3,300	APXG160ARA331MH70G
	560	J80	1,790	20	3,800	APXG160ARA561MJ80G
	820	JC0	2,620	12	5,400	APXG160ARA821MJC0G
	1,000	JC0	3,200	12	5,400	APXG160ARA102MJC0G
20	47	E61	188	30	2,800	APXG200ARA470ME61G
	47	F46	470	42	2,400	APXG200ARA470MF46G
	56	E61	224	30	2,800	APXG200ARA560ME61G
	120	F61	480	25	3,200	APXG200ARA121MF61G
	150	F80	600	25	3,200	APXG200ARA151MF80G
	180	H70	720	25	3,200	APXG200ARA181MH70G
	390	J80	1,560	22	3,650	APXG200ARA391MJ80G
25	22	E61	110	40	2,450	APXG250ARA220ME61G
	22	F46	275	45	2,350	APXG250ARA220MF46G
	27	E61	135	40	2,450	APXG250ARA270ME61G
	27	F46	337	45	2,350	APXG250ARA270MF46G
	39	F61	195	30	2,800	APXG250ARA390MF61G
	47	F61	235	30	2,800	APXG250ARA470MF61G
	56	F61	280	30	2,800	APXG250ARA560MF61G
	56	F80	280	28	2,800	APXG250ARA560MF80G
	68	F61	340	30	2,800	APXG250ARA680MF61G
	68	H70	340	28	3,000	APXG250ARA680MH70G
	120	F80	600	28	2,800	APXG250ARA121MF80G
	150	H70	750	28	3,000	APXG250ARA151MH70G
	150	J80	750	25	3,400	APXG250ARA151MJ80G
	180	J80	900	25	3,400	APXG250ARA181MJ80G

New products are indicated in red text.

◆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

■ 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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