NPCAP™-PXA Series

- Super low ESR, impedance and high heat resistance have been obtained by using conductive polymer as electrolyte
- Rated voltage range : 2.5 to 25Vdc, case size range : φ6.3×5.2L to φ10×12.2L (Case code HC0 and JC0 newly added)
- Suitable for DC-DC converters, voltage regulators and decoupling applications used to computer motherboards etc.
- High heat resistance to reflow soldering (See reflow soldering conditions)
- Pb-free design



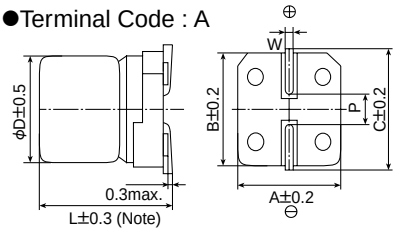
◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−55 to +105℃
Rated Voltage Range	2.5 to 25Vdc
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Surge Voltage	Rated voltage×1.15V (at 105℃)
Leakage Current	Shall not exceed values shown in STANDARD RATINGS. (at 20℃ after 2 minutes)
Dissipation Factor (tanδ)	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 2000 hours at 105℃. Appearance: No significant damage Capacitance change: ≦±20% of the initial value DF (tanδ): ≦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 500 hours. Appearance: No significant damage Capacitance change: ≦±20% of the initial value DF (tanδ): ≦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 1000 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. Appearance: No significant damage Capacitance change: ≦±20% of the initial value DF (tanδ): ≦150% of the initial specified value ESR: ≦150% of the initial specified value Leakage current: ≦The initial specified value
Failure Rate	1% per 1000 hours maximum (Confidence level 60% at 105℃)

*Note : If any doubt arises, measure the leakage current after following voltage treatment.
Voltage treatment : DC rated voltage are applied to the capacitors for 120 minutes at 105℃.

◆DIMENSIONS [mm]

●Terminal Code : A



Note : L±0.5 for HC0 and JC0

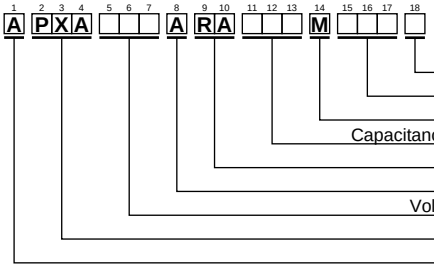
Size code	φD	L	A	B	C	W	P
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
F60	6.3	5.7	6.6	6.6	7.2	0.5 to 0.8	1.9
H70	8	6.7	8.3	8.3	9.0	0.7 to 1.1	3.1
J80	10	7.7	10.3	10.3	11.0	0.7 to 1.1	4.5
HC0	8	12.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JC0	10	12.2	10.3	10.3	11.0	0.7 to 1.1	4.5

◆MARKING

EX) PXA16VC39M



◆PART NUMBERING SYSTEM



Please refer to "A guide to global code (conductive polymer type)"

NPCAP™-PXA Series

◆STANDARD RATINGS

WV(Vdc)	Cap(μF)	Size code	Leakage current (μAmax/after 2 min.)	ESR (mΩmax/20℃, 100kHz)	Rated ripple current (mArms/100k to 300kHz) -55 to +105℃	Part No.
2.5	220	F55	110	25	2500	APXA2R5ARA221MF55G
	220	F60	110	25	2500	APXA2R5ARA221MF60G
	560	H70	280	23	3100	APXA2R5ARA561MH70G
	680	HC0	340	12	4770	APXA2R5ARA681MHC0S
	1000	J80	500	19	4240	APXA2R5ARA102MJ80G
	1500	JC0	750	10	5500	APXA2R5ARA152MJC0S
4	100	F55	80	26	2450	APXA4R0ARA101MF55G
	100	F60	80	26	2450	APXA4R0ARA101MF60G
	150	F55	120	26	2450	APXA4R0ARA151MF55G
	150	F60	120	26	2450	APXA4R0ARA151MF60G
	220	H70	176	25	3020	APXA4R0ARA221MH70G
	330	H70	264	25	3020	APXA4R0ARA331MH70G
	470	J80	376	20	4130	APXA4R0ARA471MJ80G
	560	HC0	448	12	4770	APXA4R0ARA561MHC0S
	680	J80	544	20	4130	APXA4R0ARA681MJ80G
	820	JC0	656	10	5500	APXA4R0ARA821MJC0S
	1200	JC0	960	10	5500	APXA4R0ARA122MJC0S
6.3	68	F60	85.7	27	2400	APXA6R3ARA680MF60G
	82	F55	103	27	2400	APXA6R3ARA820MF55G
	82	F60	103	27	2400	APXA6R3ARA820MF60G
	100	F55	126	27	2400	APXA6R3ARA101MF55G
	100	F60	126	27	2400	APXA6R3ARA101MF60G
	120	F60	151	27	2400	APXA6R3ARA121MF60G
	150	H70	189	25	3020	APXA6R3ARA151MH70G
	220	H70	277	25	3020	APXA6R3ARA221MH70G
	330	J80	416	20	4130	APXA6R3ARA331MJ80G
	390	HC0	491	12	4770	APXA6R3ARA391MHC0S
	470	J80	592	20	4130	APXA6R3ARA471MJ80G
	470	HC0	592	12	4770	APXA6R3ARA471MHC0S
	680	JC0	857	10	5500	APXA6R3ARA681MJC0S
	820	JC0	1033	10	5500	APXA6R3ARA821MJC0S
10	47	F60	94	31	2250	APXA100ARA470MF60G
	56	F55	112	31	2250	APXA100ARA560MF55G
	56	F60	112	31	2250	APXA100ARA560MF60G
	120	H70	240	27	2800	APXA100ARA121MH70G
	150	H70	300	27	2800	APXA100ARA151MH70G
	270	J80	540	24	3770	APXA100ARA271MJ80G
	270	HC0	540	14	4420	APXA100ARA271MHC0S
	330	J80	660	24	3770	APXA100ARA331MJ80G
	330	HC0	660	14	4420	APXA100ARA331MHC0S
	470	JC0	940	12	5300	APXA100ARA471MJC0S
	560	JC0	1120	12	5300	APXA100ARA561MJC0S
16	33	F60	106	37	2050	APXA160ARA330MF60G
	39	F55	125	37	2050	APXA160ARA390MF55G
	39	F60	125	37	2050	APXA160ARA390MF60G
	82	H70	262	30	2700	APXA160ARA820MH70G
	150	J80	480	26	3430	APXA160ARA151MJ80G
	180	J80	576	26	3430	APXA160ARA181MJ80G
	180	HC0	576	16	4360	APXA160ARA181MHC0S
	220	JC0	704	14	5050	APXA160ARA221MJC0S
	330	JC0	1056	14	5050	APXA160ARA331MJC0S
20	22	F55	88	50	1650	APXA200ARA220MF55G
	22	F60	88	50	1650	APXA200ARA220MF60G
	39	H70	156	45	2000	APXA200ARA390MH70G
	47	H70	188	45	2000	APXA200ARA470MH70G
	82	J80	328	40	2500	APXA200ARA820MJ80G
25	10	F60	125	65	1500	APXA250ARA100MF60G
	22	H70	275	50	1800	APXA250ARA220MH70G
	39	J80	488	45	2100	APXA250ARA390MJ80G