

NPCAP™-PXT 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 : 47 to 820μF
- Case size : φ 5×3.9L to φ 6.3×7.7L
- Endurance : 3,000 to 15,000 hours at 105°C
- Humidity : 85°C , 85% RH for 1,000hours.
- Suitable for DC-DC converters, the outdoor setting equipment that humidity environment is severe.
- Solvent resistant type
- RoHS Compliant
- Halogen Free

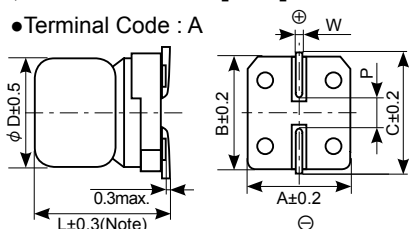
◆ SPECIFICATIONS

Items	Characteristics										
Category											
Temperature Range	-55 to +105°C										
Rated Voltage Range	2.5 to 16Vdc										
Capacitance Tolerance	±20% (M) (at 20°C , 120Hz)										
Surge Voltage	Rated voltage×1.15 (at 105°C)										
Leakage Current	Shall not exceed values shown in STANDARD RATINGS. (at 20°C after 2 minutes)										
Dissipation Factor (tan δ)	0.12 max. (at 20°C , 120Hz)										
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25°C) / Z(+20°C) ≤ 1.15 Z(-55°C) / Z(+20°C) ≤ 1.25 (at 100kHz)										
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 15,000 hours (E40, E45, F45 : 3,000 hours) at 105°C .										
	<table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>DF (tan δ)</td> <td>≤ 150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤ 150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	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
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DF (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°C after subjecting them to the DC rated voltage at 85°C , 85% RH for 1,000 hours.										
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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 105°C for 30 seconds through a protective resistor(R=1kΩ)and discharge for 5 minutes 30 seconds.										
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DF (tan δ)	≤ 150% of the initial specified value										
ESR	≤ 150% of the initial specified value										
Leakage current	≤ The initial specified value										
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105°C)										

*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]

- Terminal Code : A

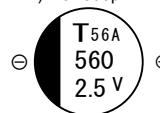


Note : L±0.1/-0.2 for E40, E45 and F45

Size Code	φ D	L	A	B	C	W	P
E40	5	3.9	5.3	5.3	5.9	0.5 to 0.8	1.4
E45	5	4.4	5.3	5.3	5.9	0.5 to 0.8	1.4
E61	5	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F45	6.3	4.4	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

◆ MARKING

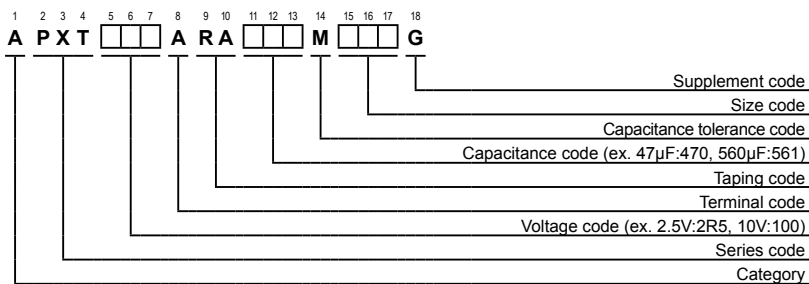
EX) 2.5V560μF



Please contact us for mass production schedule.
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NPCAP™-PXT Series

◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size code	Leakage current (μA max./ after 2min.)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mArms/ 105°C, 100kHz)	Part No.
2.5	220	E40	700	25	2,100	APXT2R5ARA221ME40G
	220	E45	700	25	2,100	APXT2R5ARA221ME45G
	330	E61	700	20	2,700	APXT2R5ARA331ME61G
	330	F45	700	20	2,700	APXT2R5ARA331MF45G
	390	E61	700	20	2,700	APXT2R5ARA391ME61G
	390	F61	700	20	3,000	APXT2R5ARA391MF61G
	560	F61	700	20	3,000	APXT2R5ARA561MF61G
820	F80	1,020	15	3,500	APXT2R5ARA821MF80G	
4	150	E40	700	25	2,100	APXT4R0ARA151ME40G
	150	E45	700	25	2,100	APXT4R0ARA151ME45G
	270	E61	700	20	2,700	APXT4R0ARA271ME61G
	270	F45	700	20	2,700	APXT4R0ARA271MF45G
	330	F61	700	20	3,000	APXT4R0ARA331MF61G
	390	F61	780	20	3,000	APXT4R0ARA391MF61G
	680	F80	1,360	15	3,500	APXT4R0ARA681MF80G
6.3	100	E40	700	25	2,100	APXT6R3ARA101ME40G
	100	E45	700	25	2,100	APXT6R3ARA101ME45G
	150	E61	700	20	2,700	APXT6R3ARA151ME61G
	220	E61	700	20	2,700	APXT6R3ARA221ME61G
	220	F45	700	20	2,700	APXT6R3ARA221MF45G
	220	F61	700	20	3,000	APXT6R3ARA221MF61G
	330	F61	1,030	20	3,000	APXT6R3ARA331MF61G
	560	F80	1,760	15	3,500	APXT6R3ARA561MF80G
10	56	E45	700	50	1,860	APXT100ARA560ME45G
	82	F45	700	45	2,000	APXT100ARA820MF45G
	120	E61	700	45	2,000	APXT100ARA121ME61G
	220	F61	1,100	40	2,200	APXT100ARA221MF61G
	390	F80	1,950	15	3,500	APXT100ARA391MF80G
16	47	E45	700	50	1,860	APXT160ARA470ME45G
	68	F45	700	45	2,000	APXT160ARA680MF45G
	100	E61	800	45	2,000	APXT160ARA101ME61G
	180	F61	1,440	40	2,200	APXT160ARA181MF61G
	270	F80	864	13	4,400	APXT160ARA271MF80G

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