NP CAP™-PX Series

- A new conductive polymer is employed as electrolyte
- For digital equipment
- 4 to 25Vdc
- High heat reflow capability & solvent-proof type
- Solder land pad is the same as conventional lytics

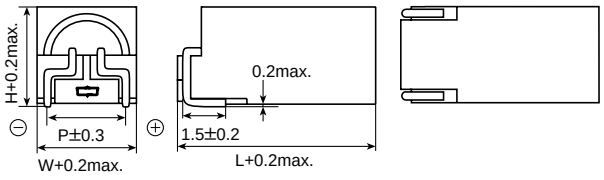
◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−55 to +105℃
Rated Voltage Range	4 to 25Vdc
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Surge Voltage	Rated voltage×1.15 (V) (at 105℃)
Leakage Current	I=0.2CV (max.) Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)
Dissipation Factor (tanδ)	0.12max. (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
	D.F. (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
	D.F. (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
	D.F. (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 Type : FC



Case code	L	W	H	P
D8	8.3	4.6	4.5	4.0

◆PART NUMBERING SYSTEM

PX 16 FC 15 M D8

- D8: Case code
- M: Cap tolerance (±20%)
- 15: Nominal cap code
- FC: Terminal type (VC or FC)
- 16: Rated voltage in volts
- PX: Series name

Capacitance	Code
6.8μF	6R8
22μF	22

◆STANDARD RATINGS

Case code	Rated voltage (Vdc)	Capacitance (μF)	ESR (mΩmax./ 20℃, 100k to 300kHz)	Rated ripple current (mArms/100k to 300kHz) –55 to +105℃	Part number
D8	4	47	80	1,000	PX4FC47MD8
		68	80	1,000	PX4FC68MD8
	6.3	33	80	1,000	PX6.3FC33MD8
		39	80	1,000	PX6.3FC39MD8
	10	22	100	1,000	PX10FC22MD8
		33	100	1,000	PX10FC33MD8
	16	15	120	800	PX16FC15MD8
	25	6.8	150	720	PX25FC6R8MD8

Sub standard