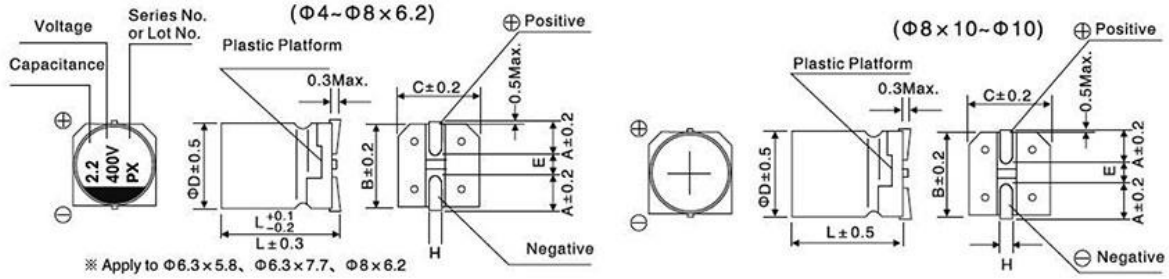
PX Series

- Chip type, Designed for surface mounting on high density PC board
- Wide temperature range from -55℃ to +105℃
- Suitable for the automotive electrical parts and lighting equipment etc.
- Life time: +105℃ 2000 hours
- **RoHs Compliant**

◆ SPECIFICATIONS

Items	Characteristics													
Category Temperature Range	-55℃ to +105℃(6.3 to 100Vdc) -40℃ to +105℃(160 to 400Vdc)													
Rated Voltage Range	6.3 to 400Vdc													
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)													
Leakage Current	6.3 to 100Vdc : I≤0.03CV 160 to 400Vdc : I≤0.04CV +100μA													
	Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage(V) (at 20℃ after 1 minutes)													
Dissipation Factor (tan δ)	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160	200	250	400	
	tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.08	0.20	0.20	0.20	0.25	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160	200	250	400	
	Z(-55℃)/Z(+20℃)	4	4	3	3	3	3	3	4	-	-	-	-	
	Z(-40℃)/Z(+20℃)	-	-	-	-	-	-	-	-	6	6	6	10	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to the rated voltage is applied for 2000 hours(160 to 400V: 3000 hours) at 105℃.													
	Capacitance change	≤±20% of the initial value.												
	D.F. (tan δ)	≤200% of the initial specified value.												
	Leakage current	≤ The initial specified value.												
Shelf Life	The following specifications shall be satisfied when the capacitors performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20℃ after exposing them for 1000hours at 105℃ without voltage applied.													
	Capacitance change	≤±20% of the initial value.												
	D.F. (tan δ)	≤200% of the initial specified value.												
	Leakage current	≤The initial specified value.												

◆ DIMENSIONS [mm]



(mm)

	4×5.4	5×5.4	6.3×5.4	6.3×5.8	6.3×7.7	8×6.2	8×10	10×10
A	1.8	2.1	2.4	2.4	2.4	3.3	2.9	3.2
B	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	5.8	7.7	6.2	10	10
H	0.5 ~ 0.8						0.8 ~ 1.1	

PX Series

◆ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Ripple current mArms/105℃,120Hz
6.3(0J)	220	8×10	0.22	161
	330	8×10	0.22	288
	470	10×10	0.22	340
	680	10×10	0.22	408
	1000	10×10	0.22	495
10(1A)	100	8×6.2	0.19	90
	220	8×10	0.19	173
	330	10×10	0.19	318
	470	10×10	0.19	351
	680	10×10	0.19	392
16(1C)	100	8×6.2	0.16	148
	220	8×10	0.16	330
	330	10×10	0.16	441
	470	10×10	0.16	489
25(1E)	47	8×6.2	0.14	79
	100	8×10	0.14	181
	220	10×10	0.14	351
	330	10×10	0.14	372
35(1V)	33	8×6.2	0.12	76
	47	8×10	0.12	124
	100	10×10	0.12	304
	220	10×10	0.12	450
50(1H)	22	8×6.2	0.10	67
	33	8×10	0.10	133
	47	10×10	0.10	180
	100	10×10	0.10	310
63(1J)	10	8×6.2	0.10	51
	22	8×10	0.10	108
	33	10×10	0.10	185
	47	10×10	0.10	220
	100	10×10	0.10	320

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Ripple current mArms/105℃,120Hz
100(2A)	4.7	8×6.2	0.08	42
	10	8×10	0.08	75
	22	10×10	0.08	150
	33	10×10	0.08	180
	47	10×10	0.08	230
160(2C)	10	8×10	0.20	57
	18	10×10	0.20	64
200(2D)	3.3	8×10	0.20	31
	3.9	8×10	0.20	34
	4.7	8×10	0.20	37
	6.8	8×10	0.20	44
	10	10×10	0.20	64
250(2E)	3.3	8×10	0.20	31
	3.9	8×10	0.20	34
	4.7	8×10	0.20	37
	6.8	8×10	0.20	44
	10	10×10	0.20	64
400(2G)	1	8×10	0.25	25
	1.8	8×10	0.25	26
	2.2	8×10	0.25	27
	3.3	10×10	0.25	38
	3.9	10×10	0.25	39
	4.7	10×10	0.25	40

◆ RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Cap.(μF) \ Freq.(Hz)	50	120	300	1k	10k or more
1 to 47	0.80	1.00	1.15	1.40	1.67
100 to 1000	0.85	1.00	1.08	1.20	1.30