

PXD Series

• 125°C 4,000~5,000Hrs assured.

- Ultra Low Impedance.
- Wide Temperature range.
- Long Life.
- Suitable to fit for automotive equipment.
- RoHS compliant.
- Halogen-free capacitors are also available.
- AEC-Q200 compliant : Please contact us for more details, test data, information.

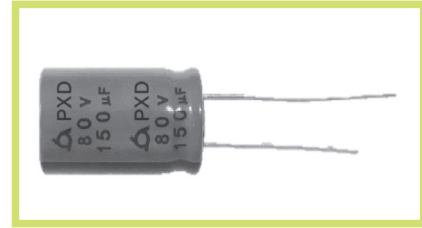
Solvent-proof

WV ≤ 80V_{DC}

PXC

PXD

Low Imp.



SPECIFICATIONS

Item	Characteristics															
Rated Voltage Range	10 ~ 80 V _{DC}															
Operating Temperature Range	-40 ~ +125°C															
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)															
Leakage Current	I = 0.03CV (μA) or 4μA, whichever is greater. Where, I:Max. Leakage current(μA),C:Nominal capacitance(μF),V:Rated voltage(V _{DC}) (at 20°C, 1 minute)															
Dissipation Factor(Tanδ)	<table><tr><td>Rated Volatag(V_{DC})</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50~63</td><td>80</td></tr><tr><td>TANδ(Max.)</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.08</td></tr></table> When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C,120Hz)	Rated Volatag(V _{DC})	10	16	25	35	50~63	80	TANδ(Max.)	0.20	0.16	0.14	0.12	0.10	0.08	
Rated Volatag(V _{DC})	10	16	25	35	50~63	80										
TANδ(Max.)	0.20	0.16	0.14	0.12	0.10	0.08										
Temperature Characteristics (Max. Impedance ratio)	<table><tr><td>Rated Voltage(V_{DC})</td><td>10</td><td>16 ~ 35</td><td>50</td><td>63~80</td></tr><tr><td>Z(-25°C)/Z(+20°C)</td><td>3</td><td>2</td><td>3</td><td>2</td></tr><tr><td>Z(-40°C)/Z(+20°C)</td><td>6</td><td>4</td><td>5</td><td>4</td></tr></table> (at 120Hz)	Rated Voltage(V _{DC})	10	16 ~ 35	50	63~80	Z(-25°C)/Z(+20°C)	3	2	3	2	Z(-40°C)/Z(+20°C)	6	4	5	4
Rated Voltage(V _{DC})	10	16 ~ 35	50	63~80												
Z(-25°C)/Z(+20°C)	3	2	3	2												
Z(-40°C)/Z(+20°C)	6	4	5	4												
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied at 125°C. <table><tr><td>ø D</td><td>10~50V</td><td>63~80V</td></tr><tr><td>10 ø ~</td><td>4,000</td><td>5,000</td></tr></table> Capacitance change ≤ ±30% of the initial value Tanδ ≤ 300% of the initial specified value Leakage current ≤ The initial specified value	ø D	10~50V	63~80V	10 ø ~	4,000	5,000									
ø D	10~50V	63~80V														
10 ø ~	4,000	5,000														
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤ ±30% of the initial value Tanδ ≤ 300% of the initial specified value Leakage current ≤ The initial specified value															
Others	Satisfied characteristics KS C IEC 60384-4															

DIMENSIONS OF PXD Series

Unit(mm)

07-001

Technical drawing of a capacitor showing three views: side, top, and bottom.

- Side View:** Shows the capacitor body with a "Safety vent" on the left and a "Sleeve" on the right. Dimensions include $\varnothing D'$ (height), L' (length), $\varnothing d \pm 0.05$ (lead diameter), 15min. (lead length), and 4min. (terminal length).
- Top View:** Shows the circular top of the capacitor with a diameter of $\varnothing 10$ and a feature dimension of $F \pm 0.5$.
- Bottom View:** Shows the circular bottom of the capacitor with a diameter of $\varnothing 12.5$ and a feature dimension of $F \pm 0.5$.

Marking : GREEN SLEEVE, BLACK INK

$\varnothing D$	10	12.5	16	18
$\varnothing d$	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
$\varnothing D'$	$\varnothing D + 0.5 \text{ max.}$			
L'	$L + 2.0 \text{ max.}$			

RATINGS OF PXD Series

Vdc	10				16				25			
Item μF	ø D × L (mm)	Imp. (ΰ max./100kHz)		Rated Ripple Current (mArms) (125°C,100kHz)	ø D × L (mm)	Imp. (ΰ max./100kHz)		Rated Ripple Current (mArms) (125°C,100kHz)	ø D × L (mm)	Imp. (ΰ max./100kHz)		Rated Ripple Current (mArms) (125°C,100kHz)
		20°C	-40°C			20°C	-40°C			20°C	-40°C	
220					10 × 12,5	0,11	1,1	720	10 × 12,5	0,11	1,1	720
330	10 × 12,5	0,11	1,1	720	10 × 12,5	0,11	1,1	720	10 × 16	0,071	0,71	950
470	10 × 12,5	0,11	1,1	720	10 × 16	0,071	0,71	950	10 × 20	0,056	0,56	1,100
1,000	10 × 20	0,056	0,56	1,100	12,5 × 20	0,044	0,31	1,250	12,5 × 25	0,030	0,21	1,550
2,200	12,5 × 25	0,030	0,21	1,550	16 × 25	0,023	0,16	2,000	16 × 31,5	0,019	0,13	2,500
3,300	16 × 25	0,023	0,16	2,000	16 × 31,5	0,019	0,13	2,500				
4,700	16 × 31,5	0,019	0,13	2,500								

V _{dc}	35				50				63			
Item μF	ø D × L (mm)	Imp. (ρ max./100kHz)		Rated Ripple Current (mA _{Arms}) (125°C,100kHz)	ø D × L (mm)	Imp. (ρ max./100kHz)		Rated Ripple Current (mA _{Arms}) (125°C,100kHz)	ø D × L (mm)	Imp. (ρ max./100kHz)		Rated Ripple Current (mA _{Arms}) (125°C,100kHz)
		20°C	-40°C			20°C	-40°C			20°C	-40°C	
100	10 × 12.5	0.11	1.10	720	10 × 12.5	0.18	1.5	590				
220	10 × 16	0.071	0.71	950	10 × 20	0.074	0.74	950	12.5 X 20	0.19	1.5	950
330	10 × 20	0.056	0.56	1,100	12.5 × 20	0.061	0.43	1,150	12.5 X 25	0.15	1.2	1,450
470	12.5 × 20	0.044	0.31	1,250	12.5 × 25	0.040	0.28	1,400	12.5 X 30	0.090	0.71	1,700
1,000	16 × 25	0.023	0.16	2,000	16 × 31.5	0.028	0.15	2,200	16 X 31.5	0.058	0.46	2,100

V _{DC}		80		
Item μF	ø D × L (mm)	Imp. ($\varnothing$ max./100kHz)		Rated Ripple Current (mA _{rms}) (125°C, 100kHz)
		20°C	-40°C	
220	12.5 × 25	0.15	1.2	1,450
330	12.5 × 30	0.090	0.71	1,700
	16 × 20	0.085	0.58	1,790
470	12.5 × 35	0.070	0.55	2,000
	16 × 25	0.061	0.48	2,030
560	18 × 25	0.049	0.34	2,280
680	18 × 30	0.041	0.26	2,580
820	18 × 35.5	0.035	0.21	2,890

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq. (Hz) Cap. (μF)	120	1k	10k	50k	100k
100	0.40	0.75	0.90	0.93	1.00
220 ~ 470	0.50	0.85	0.94	0.96	1.00
1,000	0.60	0.87	0.95	0.97	1.00
2,200 ~ 3,300	0.75	0.90	0.95	0.97	1.00
4,700	0.85	0.95	0.98	0.99	1.00