



# PUH SERIES

Computer Grade, Large Capacitor

### Features

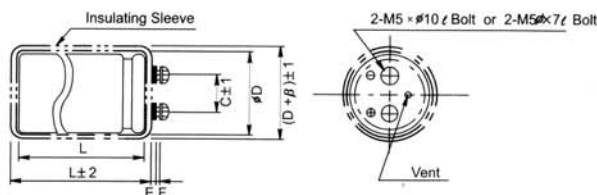
- Screw terminal type
- Ideal for inverter, computer
- Large allowable ripple current
- High reliability for continuous operation
- Computer Grade, Large Capacity
- Load life of 2000 hours at 105°C



### Specifications

Item	Performance Characteristics							
<b>Operating temperature range</b>	10V ~ 250V : -40°C ~ +105°C, 350V~ 400V : -25°C ~ +105°C							
<b>Rated working voltage range</b>	10V ~ 400V							
<b>Nominal capacitance range</b>	220 $\mu$ F ~ 470000 $\mu$ F, -10 ~ $\pm$ 50%(at 20°C, 120Hz)							
<b>D.C Leakage current(at 20°C)</b>	The following specifications shall be satisfied when the rated voltage is applied for the required time. $I \leq 0.02CV$ or 5mA (5 min), whichever is greater Where I =Leakage current( $\mu$ A) C=Nominal capacitance( $\mu$ F) V=Rated voltage(V)							
<b>Tan<math>\delta</math>(max., at 20°C, 120Hz)</b>	W.V(V)	10~16	25	35	50	63~100	160~250	350~400
	CAP( $\mu$ F)							
	220~10000	—	1.50	0.35	0.30	0.25	0.15	0.15
	15000~47000	0.50		0.50	0.40	0.35	0.30	0.20
	68000~100000	0.75		1.00	0.50	0.40	—	—
<b>Characteristics at low temperature(max.) (impedance ratio at 120Hz)</b>	W.V(V)	10~16	25~35	50~100	160~250	350~450		
	Z-25°C/Z 20°C	4	3	2	2	6		
	Z-40°C/Z 20°C	12	6	4	8	—		
<b>Load life</b>	After applying rated working voltage for 2000hours at +105°C and then being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within $\pm$ 25% of the initial measured value						
	Tan $\delta$	$\leq$ 200% of the initial specified value						
	Leakage current	$\leq$ The initial specified value						
<b>Shelf life</b>	After storage for 1000hours at + 105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within $\pm$ 25% of the initial measured value						
	Tan $\delta$	$\leq$ 200% of the initial specified value						
	Leakage current	$\leq$ 200% of the initial specified value						

### Dimensions



#### Standard lead style

$\phi$ D	C	E	F	$\beta$
35	12.7	2.5	6.0	1.0
51	22.0	2.5	6.0	1.5
63.5	28.6	2.5	6.0	1.5
76	31.0	1.5	6.5	1.5

### Ripple current coefficient

#### Frequency

Freq(Hz)	50	120	400	1K	10K
Factor	0.80	1.0	1.2	1.3	1.4

#### Temperature

Temperature	$\leq$ 45°C	65°C	85°C	105°C
Factor	3.0	2.6	2.0	1.0



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## Standard Ratings of PUH Series

φ DXL(mm)

Cap(μF)	W.V(V)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)		80(1K)	
	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>
2200															35x50	2.8
3300													35x50	2.8	35x60	3.6
4700											35x50	3.0	35x60	3.6	35x80	4.8
6800								35x50	3.7	35x70	4.1	35x80	4.8	35x100	5.2	
10000					35x50	4.3	35x70	4.9	35x90	5.2	35x100	6.2	51x80	6.9		
15000			35x50	4.0	35x70	5.9	35x90	6.5	35x100	6.2	51x90	8.1	51x110	8.8		
22000	35x50	4.3	35x70	6.0	35x90	6.9	35x120	7.9	51x90	8.1	63.5x100	10.4	63.5x120	12.9		
33000	35x70	6.4	35x90	7.2	35x120	8.3	51x100	9.6	63.5x100	11.0	63.5x120	13.2	76x120	16.2		
47000	35x90	7.2	35x120	8.0	51x90	9.8	51x120	11.9	63.5x120	13.8	76x120	16.8				
68000	35x100	7.7	51x90	10.4	51x120	10.6	63.5x100	13.8	76x120	16.9						
100000	51x90	9.6	51x120	12.4	63.5x100	12.5	76x120	16.9								
150000	51x120	12.0	63.5x100	13.4	76x120	16.9										
220000	63.5x100	14.2	76x100	16.2												
330000	76x100	18.8														
470000	76x140	20.8														

Cap(μF)	W.V(V)		100(2A)		160(2C)		200(2D)		250(2E)		350(2V)		400(2G)	
	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>	SIZE	I <sub>r</sub>
220									35x50	0.9	35x50	0.9	35x50	0.9
330							35x50	1.0	35x50	1.1	35x60	1.1	35x60	1.2
470					35x50	1.4	35x50	1.2	35x60	1.3	35x70	1.4	35x80	1.4
680					35x50	1.4	35x50	1.3	35x70	1.5	35x90	1.6	35x110	1.7
1000					35x50	1.7	35x60	1.8	35x80	1.8	35x110	1.9	51x80	2.3
1500	35x50	2.2	35x60	2.2	35x80	2.3	51x80	2.5	51x100	2.7	51x100	2.7	51x120	3.6
2200	35x60	2.4	35x80	2.8	35x100	3.0	51x100	3.2	51x120	3.8	51x120	3.8	63.5x120	4.0
3300	35x80	3.6	35x120	3.9	51x100	4.2	51x120	4.3	63.5x120	4.5	63.5x120	4.5	76x120	5.1
4700	35x100	4.8	51x100	4.8	63.5x100	5.6	63.5x120	5.7	76x120	5.7	76x120	5.7	76x150	6.7
6800	51x80	5.9	51x120	6.4	63.5x120	6.7	76x120	7.2	76x160	7.6	76x160	7.6		
10000	51x100	7.2	63.5x120	7.8	76x120	8.8	76x160	9.2						
15000	63.5x100	8.8	76x120	9.2	76x140	9.4								
22000	76x120	11.4	76x160	10.6										

I<sub>r</sub>: Maximum Permissible Ripple Current[A(rms) at 105°C, 120Hz]