

PUH SERIES

105°C, Screw terminal type

■ Features

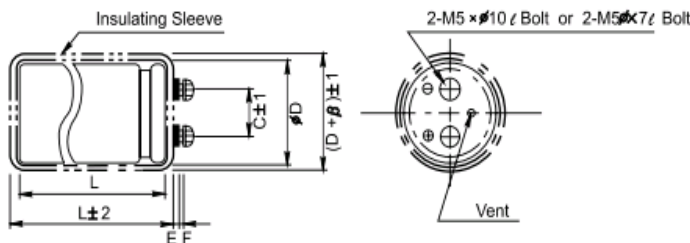
- 105°C, Screw terminal
- Large allowable ripple current
- High reliability for continuous operation
- Load life of 2,000 hours at 105°C



■ Specifications

Item	Performance Characteristics							
Operating temperature range	-40°C ~ +105°C				-25°C ~ +105°C			
Rated working voltage range	10V ~ 450V							
Nominal capacitance range	220 μF ~ 680,000 μF, ±20% (at 20°C, 120Hz)							
D.C Leakage current(at 20°C)	The following specifications shall be satisfied when the rated voltage is applied for the required time							
	I ≤ 0.02CV or 5mA (5min), whichever is smaller.							
	Where I = Leakage current(μA)		C = Nominal capacitance(μF)		V = Rated voltage (V)			
Tan δ (max., at 20°C, 120Hz)	V	10~16	25	35	50	63~100	160~250	350~450
	μF							
	220~10,000	-	1.50	0.35	0.30	0.25	0.15	0.15
	15,000~47,000	0.50	-	0.50	0.40	0.35	0.30	0.20
	68,000~100,000	0.75	-	1.00	0.50	0.40	-	-
	150,000~220,000	1.00	-	-	-	-	-	-
	330,000~680,000	-	-	-	-	-	-	-
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	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	-		
Load life	After applying rated working voltage for 2,000 hours at +105°C and then listed being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within ± 20% of the initial measured value						
	Tan δ	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						
Shelf life	After storage for 1,000hours at + 105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.							
	Capacitance change	Within ± 20% of the initial measured value						
	Tan δ	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						

■ Dimensions



Φ D	C	E	F	β
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
89	0.5	1.5	6.5	1.5

■ Ripple current coefficient

• Frequency

W.V(V)	Freq(Hz)				
	50	120	1K	10K	100K
10~450	0.8	1.0	1.2	1.3	1.4

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▣ Dimensions & Maximum permissible ripple current

μF \ V	10	16	25	35	50	63	80	
2,200							35 x 50 2.4	
2,700						35 x 50 0.2	35 x 50 2.6	
3,300						35 x 50 2.4	35 x 50 2.8	
3,900					35 x 50 4.4	35 x 60 2.7	35 x 60 3.3	
4,700					35 x 50 3.9	35 x 60 3.0	35 x 60 3.5	
5,600					35 x 60 4.4	35 x 60 3.4	35 x 80 4.3	
6,800				35 x 50 3.0	35 x 60 3.9	35 x 70 3.8	35 x 80 4.7	
8,200				35 x 50 3.2	35 x 70 4.4	35 x 80 4.5	35 x 100 5.0	
10,000			35 x 50 3.4	35 x 60 3.4	35 x 80 5.4	35 x 80 4.7	35 x 120 6.0	
12,000			35 x 50 3.6	35 x 60 4.0	35 x 80 5.9	35 x 100 5.3	51 x 80 6.3	
15,000		35 x 50 3.8	35 x 60 4.0	35 x 70 4.5	35 x 80 6.4	35 x 120 6.4	51 x 100 8.0	
18,000		35 x 50 4.1	35 x 60 4.6	35 x 80 5.5	35 x 90 7.7	35 x 120 6.7	51 x 120 9.3	
22,000	35 x 50 4.8	35 x 60 4.6	35 x 70 5.0	35 x 80 6.6	35 x 100 8.2	51 x 80 7.0	51 x 120 10.0	
27,000	35 x 50 5.0	35 x 60 5.4	35 x 80 6.0	35 x 100 7.3	51 x 80 9.4	51 x 120 10.5	63.5 x 100 10.8	
33,000	35 x 60 5.7	35 x 60 5.5	35 x 80 6.3	35 x 120 8.6	51 x 100 10.5	51 x 120 11.6	76 x 100 13.0	
39,000	35 x 80 6.1	35 x 80 6.6	35 x 100 7.4	51 x 80 8.6	51 x 120 11.4	63.5 x 100 12.0	76 x 100 13.7	
47,000	35 x 80 6.7	35 x 80 7.0	35 x 120 9.0	51 x 100 10.6	51 x 120 12.8	63.5 x 120 14.3	76 x 120 15.7	
56,000	35 x 80 7.2	35 x 100 8.2	51 x 80 9.5	51 x 100 10.8	63.5 x 100 13.9	63.5 x 120 15.7	76 x 120 17.3	
68,000	35 x 100 8.1	35 x 100 8.4	51 x 100 10.1	51 x 120 13.0	63.5 x 120 14.8	76 x 120 17.8	76 x 140 19.0	
82,000	35 x 100 8.5	51 x 80 10.3	51 x 100 10.8	63.5 x 100 14.0	76 x 120 16.0	76 x 140 19.0	89 x 140 21.3	
100,000	35 x 120 10.3	51 x 80 10.2	51 x 120 14.2	63.5 x 120 15.7	76 x 120 18.2	76 x 140 19.5		
120,000	51 x 80 10.7	51 x 100 12.5	63.5 x 100 14.3	63.5 x 120 17.0	76 x 120 20.2	89 x 140 21.0		
150,000	51 x 100 12.8	51 x 120 14.5	63.5 x 120 17.0	76 x 120 18.0	89 x 140 22.4			
180,000	51 x 120 15.3	51 x 120 15.0	63.5 x 120 18.0	76 x 120 19.2	89 x 140 23.0			
220,000	51 x 120 16.4	63.5 x 120 18.2	76 x 120 20.5	76 x 140 22.8				
270,000	63.5 x 120 19.0	63.5 x 120 19.4	76 x 120 21.0	89 x 140 24.7				
330,000	63.5 x 120 19.1	76 x 120 20.1	76 x 140 22.3					
390,000	76 x 120 20.7	76 x 120 20.5	89 x 140 24.0					
470,000	76 x 120 20.8	76 x 140 23.0						
560,000	76 x 140 23.0	89 x 140 26.5						
680,000	89 x 140 25.0	89 x 140 27.0	Case size : $\Phi\text{D} \times \text{L}(\text{mm})$ Maximum permissible ripple current [A(rms) at 105°C, 120Hz]					

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▣ Dimensions & Maximum permissible ripple current

μF \ V	100	160	200	250	350	400	450
220				35 x 50 0.7	35 x 50 0.8	35 x 50 0.8	
270				35 x 50 0.8	35 x 50 0.9	35 x 50 1.0	
330			35 x 50 1.0	35 x 50 0.9	35 x 50 1.0	35 x 60 1.1	
390			35 x 50 1.1	35 x 50 1.0	35 x 60 1.1	35 x 60 1.2	
470		35 x 50 1.0	35 x 50 1.2	35 x 50 1.1	35 x 60 1.4	35 x 70 1.3	
560		35 x 50 1.2	35 x 50 1.3	35 x 60 1.2	35 x 80 1.6	35 x 80 1.4	
680		35 x 50 1.3	35 x 50 1.4	35 x 60 1.4	35 x 80 1.7	35 x 100 1.6	
820		35 x 50 1.4	35 x 60 1.5	35 x 80 1.6	35 x 100 1.8	35 x 120 1.8	
1,000		35 x 50 1.6	51 x 60 1.7	35 x 80 1.7	35 x 120 2.0	51 x 80 2.0	51 x 80 1.8
1,200		35 x 60 1.9	35 x 60 1.8	35 x 100 1.8	51 x 80 2.2	51 x 100 2.5	51 x 100 2.3
1,500	35 x 50 2.2	35 x 60 2.0	35 x 80 2.2	35 x 100 2.0	51 x 100 2.8	51 x 120 3.0	51 x 120 2.7
1,800	35 x 50 2.6	35 x 80 2.3	35 x 80 2.4	35 x 120 2.3	51 x 120 3.2	51 x 100 3.2	51 x 120 3.0
2,200	35 x 60 2.8	35 x 80 2.6	35 x 100 2.6	35 x 120 2.5	51 x 120 3.8	63.5 x 100 3.8	63.5 x 100 3.5
2,700	35 x 60 3.3	35 x 100 3.1	35 x 120 3.4	51 x 100 3.3	63.5 x 100 4.2	63.5 x 110 3.9	63.5 x 120 4.8
3,300	35 x 80 4.0	35 x 120 3.6	51 x 80 3.9	51 x 120 4.0	63.5 x 120 4.3	63.5 x 120 5.0	76 x 120 5.3
3,900	35 x 80 4.3	51 x 80 3.7	51 x 100 4.7	51 x 120 4.2	76 x 120 6.3	76 x 120 6.4	76 x 130 6.8
4,700	35 x 100 4.8	51 x 100 4.4	51 x 100 5.0	63.5 x 120 5.3	76 x 120 5.7	76 x 140 7.0	89 x 140 8.0
5,600	35 x 100 5.2	51 x 100 4.7	51 x 100 5.5	63.5 x 120 6.0	76 x 130 8.0	89 x 140 8.8	
6,800	35 x 120 5.4	51 x 120 5.7	63.5 x 120 6.7	76 x 120 7.3	76 x 140 9.0	89 x 140 9.6	
8,200	51 x 80 6.0	63.5 x 100 6.4	63.5 x 120 7.2	76 x 120 8.0	89 x 140 10.6		
10,000	51 x 100 7.2	63.5 x 120 8.0	63.5 x 120 9.0	76 x 140 9.5			
12,000	51 x 120 8.7	76 x 100 9.0	76 x 120 9.6	89 x 140 11.3			
15,000	51 x 120 9.8	76 x 120 10.8	76 x 120 10.8	89 x 140 11.6			
18,000	63.5 x 100 10.4	76 x 140 12.8	76 x 140 12.5				
22,000	63.5 x 120 11.7	89 x 140 14.0					
27,000	76 x 120 13.0	89 x 140 15.2					
33,000	76 x 120 14.6						
39,000	76 x 140 15.3						
47,000	89 x 140 18.5						
56,000	89 x 140 20.4	Case size : $\Phi\text{D} \times \text{L}(\text{mm})$ Maximum permissible ripple current [A(rms) at 105°C, 120Hz]					