

HU Series Snap-in Type 105°C

HP **Long life** → HU



Features

- ◆ Endurance 3000 hours 105°C
- ◆ ROHS compliant

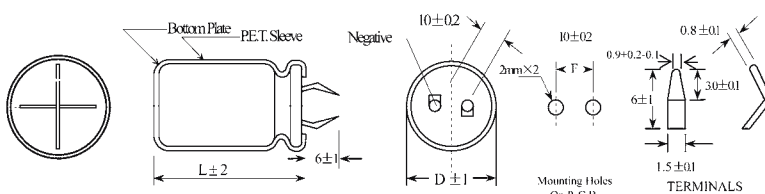
Specifications

Item	Performance Characteristics						
Operating Temperature Range	-40 to +105°C	-25 to +105°C					
Capacitance Range	560 to 47000uF	47 to 2700uF					
Rated Voltage Range	16 to 100VDC	160 to 450VDC					
Capacitance Tolerance	±20%(120Hz,+20°C)	±20%(120Hz,+20°C)					
Leakage Current (+20°C,max.)	$I \leq 3 \sqrt{CV}$ (µA) (After 5 minute with rated working voltage applied.) I= Leakage Current(µA) C= Rated Capacitance V= Rated voltage(V)						
Dissipation Factor (tan δ) (+20°C, at 120Hz)	Less than the value under table (%)						
	Cap (µ F) / W.V.(V)	16	25~35	50~63	80~100	160~250	315~450
	47~390	-	-	-	15	15	20
	470~3900	-	20	20	20	15	20
	4700~8200	35	30	30	25	-	-
	10000~22000	40	35	30	-	-	-
Low Temperature Characteristics (120Hz)	Impedance ratio max						
	Working voltage(VDC)	16	25~100	160~250	315~450		
	Z-25°C / Z+20°C	5	4	4	8		
Z-40°C/Z+20°C	20	20	-	-			
Endurance	Test condition Duration time :3000Hrs Ambient temperature :+105°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : ≤ ±20% of the initial measured value Dissipation factor : ≤200% of the initial specified value Leakage current : ≤The initial specified value						
Shelf Life	Test condition Duration time :1000Hrs Ambient temperature :+105°C Applied voltage :None After test requirement at +20°C:Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.						

Multiplier for Ripple Current vs. Frequency

CAP (µF) \ Hz	50(60)	120	1K	10K	50K-100K
10<CAP≤100	0.8	1	1.36	1.48	1.53
100<CAP≤1000	0.8	1	1.25	1.35	1.38
1000<CAP	0.8	1	1.17	1.25	1.28

Diagram of Dimensions:(unit:mm)



Safety Device

Case Size

φ DxDL(mm)

WV (V) Cap(uF)	16V		25V		35V		50V		63V		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
1200									22x26	1.25	
1500									22x31	1.47	
1800								22x26	1.34	22x31	1.58
										25x26	1.52
2200								22x31	1.50	22x36	1.82
										25x31	1.75
2700								22x31	1.70	22x41	2.07
								25x26	1.70	25x36	2.11
										30x26	1.93
3300					22x26	1.45	22x36	1.98	22x46	2.33	
							25x31	2.00	25x36	2.27	
									30x31	2.24	
3900					22x31	1.69	22x41	2.25	25x41	2.54	
							25x31	2.28	30x36	2.55	
							30x26	2.22			
4700			22x26	1.61	22x36	2.02	22x46	2.56	25x51	2.97	
					25x26	1.78	25x36	2.61	30x41	2.90	
							30x31	2.58	35x32	2.83	
5600			22x31	1.80	22x36	2.13	22x51	2.89	30x41	3.28	
					25x31	2.04	25x41	2.81	35x37	3.24	
					30x26	2.12	30x31	2.95			
6800	22x26	1.75	22x31	1.91	22x41	2.41	25x46	3.37	30x51	3.73	
			25x26	1.91	25x36	2.31	30x36	3.39	35x42	3.71	
					30x26	2.31	35x32	3.31			
8200	22x31	2.00	22x36	2.14	22x51	2.85	30x41	3.71	35x47	4.16	
			25x31	2.34	25x41	2.73	35x37	3.66			
			30x26	2.25	30x31	2.75					
10000	22x31	2.10	22x41	2.65	25x46	3.05	30x51	4.09	35x52	4.69	
	25x26	2.05	25x36	2.61	30x36	3.05	35x42	4.07			
			30x31	2.61							
12000	22x36	2.31	22x46	2.69	25x51	3.37	35x47	4.56			
	25x31	2.30	25x41	2.81	30x41	3.28					
	30x26	2.38	30x31	2.74	35x32	3.20					
15000	22x41	2.68	25x46	3.27	30x46	3.74	35x52	4.77			
	25x36	2.68	30x36	3.13	35x37	3.69					
	30x31	2.57	35x32	3.26							
18000	22x46	2.98	25x51	3.54	35x42	4.37					
	25x41	3.16	30x41	3.56							
	30x31	3.00	35x37	3.84							
22000	25x46	3.40	30x46	4.24	35x52	4.92					
	30x36	3.39	35x37	3.96							
	35x32	3.25									
27000	25x51	3.85	35x47	4.75							
	30x41	3.83									
	35x32	3.74									
33000	30x46	4.30	35x52	5.50							
	35x37	4.27									
39000	30x51	4.81									
	35x42	4.80									
47000	35x47	5.53									

Ripple Current(A rms) at 105°C /120Hz

φ DxL(mm)

WV (V) Cap(uF)	80V		100V		160V		200V		220V	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
220							22x26	1.05	22x26	1.10
270									22x31	1.15
330							22x31	1.25	22x36	1.25
							25x26	1.25	25x26	1.25
390					22x26	1.30	22x31	1.35	22x36	1.40
							25x26	1.35	25x31	1.40
470					22x31	1.55	22x36	1.50	22x41	1.45
					25x26	1.55	25x31	1.50	25x36	1.45
560			22x26	1.07	22x36	1.67	22x41	1.67	22x46	1.70
					25x31	1.67	25x31	1.67	25x41	1.70
					30x26	1.67	30x26	1.67	30x31	1.70
			22x31	1.22	22x41	1.82	22x46	1.78	25x46	1.78
680			25x26	1.22	25x31	1.82	25x36	1.78	30x36	1.78
					30x26	1.82	30x31	1.78	35x27	1.78
							35x27	1.78		
820	22x26	1.11	22x31	1.35	22x46	2.04	22x51	2.04	25x51	2.10
			25x26	1.35	25x36	2.04	25x46	2.04	30x41	2.10
					30x31	2.04	30x31	2.04	35x32	2.10
					35x27	2.04	35x27	2.04		
1000	22x26	1.29	22x31	1.54	22x51	2.25	25x51	2.30	30x46	2.40
			25x31	1.56	25x41	2.25	30x36	2.30	35x37	2.40
					30x31	2.25	35x32	2.30		
					35x27	2.25				
1200	22x31	1.44	22x41	1.74	25x46	2.49	30x41	2.65	30x51	2.60
	25x26	1.39	25x31	1.76	30x36	2.49	35x32	2.65	35x42	2.60
			30x26	1.71	35x32	2.49				
1500	22x31	1.61	22x46	1.99	30x41	2.84	30x51	3.08	35x47	3.00
	25x26	1.62	25x36	2.03	35x32	2.84	35x42	3.08		
			30x31	2.00						
1800	22x36	1.83	25x41	2.28	30x46	3.32	35x47	3.48		
	25x31	1.86	30x36	2.27	35x37	3.00				
	30x26	1.81								
2200	22x41	2.09	25x51	2.57	35x47	3.50	35x52	3.78		
	25x36	2.01	30x36	2.59						
	30x26	2.10	35x32	2.52						
2700	25x41	2.43	30x46	2.94	35x52	4.00				
	30x31	2.43	35x37	2.90						
3300	25x46	2.76	30x51	3.32						
	30x36	2.78	35x42	3.31						
	35x32	2.71								
3900	25x51	2.92	35x47	3.69						
	30x41	3.12								
	35x32	3.07								
4700	30x46	3.52	35x52	4.14						
	35x37	3.50								
5600	30x51	3.80								
	35x42	3.87								
6800	35x47	4.19								

Ripple Current(A rms) at 105°C /120Hz

φ DxL(mm)

WV (V) Cap(μF)	250V		315V		400V		420V		450V	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
68					22x26	0.55			22x26	0.52
82					22x26	0.64	22x26	0.64	22x31	0.64
									25x26	0.64
100					22x31	0.70	22x31	0.70	22x36	0.69
					25x26	0.70	25x26	0.70	25x31	0.69
120			22x26	0.75	22x36	0.75	22x36	0.75	22x41	0.80
					25x26	0.75	25x31	0.75	25x31	0.80
									30x26	0.80
150			22x31	0.82	22x41	0.88	22x41	0.88	22x46	0.88
			25x26	0.82	25x26	0.83	25x36	0.88	25x36	0.88
					25x31	0.88	30x26	0.88	30x31	0.88
					30x26	0.88				
180			22x36	0.92	22x46	0.98	22x46	0.95	22x51	1.00
			25x26	0.92	25x36	0.98	25x36	0.95	25x41	1.00
					30x31	0.98	30x31	0.95	30x31	1.00
					35x27	0.98				
220	22x26	1.10	22x41	1.04	22x51	1.10	22x51	1.10	22x51	1.00
	22x26	1.10	25x31	1.04	25x41	1.10	25x46	1.10	25x46	1.12
			30x26	1.04	30x31	1.10	30x36	1.10	30x36	1.12
					35x27	1.10	35x27	1.10	35x32	1.12
270	22x36	1.18	22x46	1.16	22x51	1.19	25x51	1.22	30x41	1.28
	25x26	1.18	25x36	1.16	25x46	1.22	30x41	1.22	35x37	1.28
			30x26	1.16	30x36	1.22	35x32	1.22		
					35x35	1.22				
330	22x41	1.30	22x51	1.33	22x61	1.45	30x46	1.45	30x51	1.45
	25x31	1.30	25x41	1.33	25x51	1.44	30x51	1.52	35x42	1.45
	30x26	1.30	30x31	1.33	30x41	1.44	35x37	1.45		
			35x27	1.33	35x32	1.44				
390	22x46	1.49	25x46	1.47	30x46	1.60	30x51	1.55	35x42	1.50
	25x36	1.49	30x36	1.47	35x37	1.60	35x42	1.55		
	30x26	1.49	35x32	1.47						
470	22x51	1.65	25x51	1.70	30x51	1.90	35x47	1.90	35x52	1.85
	25x41	1.65	30x41	1.70	35x42	1.90				
	30x31	1.65	35x32	1.70	35x47	2.10				
	35x27	1.65								
560	25x46	1.80	30x46	2.05	35x47	2.12	35x47	2.10	35x57	2.15
	30x36	1.80	35x37	2.05			35x52	2.15		
	35x27	1.80								
680	25x51	2.00	30x51	2.17	35x57	2.35	35x57	2.35	35x57	2.20
	30x41	2.00	35x42	2.17					35x62	2.30
	35x32	2.00								
820	30x46	2.30	35x47	2.20	35x57	2.50				
	35x37	2.30								
1000	30x51	2.47			35x80	2.65				
	35x42	2.47								
1200	35x47	2.60			35x80	2.75				
1500	35x52	3.00								

Ripple Current(A rms) at 105°C /120Hz

Snap-in