

φ DxL(mm)

Cap (μF)	φ D	WV															
		350								400							
		22		25		30		35		22		25		30		35	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
47										22x21	0.42						
68										22x21	0.51						
82										22x26	0.83						
100		22x26	0.76							22x26	0.95	25x21	0.95				
120		22x26	0.89	25x26	0.89					22x26	1.07	25x21	1.07				
150		22x31	0.99	25x26	0.99	30x21	0.99			22x31	1.26	25x26	1.26	30x21	1.26		
180		22x36	1.15	25x31	1.15	30x26	1.15			22x36	1.46	25x31	1.46	30x26	1.46		
220		22x41	1.40	25x36	1.40	30x26	1.40	35x22	1.40	22x41	1.75	25x36	1.75	30x31	1.75		
												25x31	1.62	30x26	1.62		
270				25x41	1.63	30x31	1.63	35x27	1.63			25x41	1.85	30x31	1.85	35x27	1.85
										22x46	1.73	25x36	1.73				
330				25x46	1.88	30x36	1.88	35x27	1.88			25x46	2.10	30x36	2.10	35x32	2.10
										22x51	1.98	25x41	1.98	30x31	1.98	35x27	1.98
390						30x36	2.12	35x32	2.12					30x41	2.35	35x37	2.35
										22x56	2.20	25x51	2.20	30x36	2.20	35x32	2.20
470						30x41	2.41	35x37	2.41							35x42	2.60
												25x56	2.45	30x41	2.45	35x37	2.45
560								35x42	2.80							35x47	2.95
														30x46	2.90	35x42	2.90
680								35x47	3.20							35x47	3.15
														30x56	3.05		

Cap (μF)	φ D	WV																		
		420								450										
		22		25		30		35		22		25		30		35		40		
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
47		22x21	0.38							22x21	0.36									
68		22x26	0.49							22x26	0.60									
82		22x31	0.85	25x26	0.85					22x26	0.89	25x21	0.89							
		22x26	0.79	25x21	0.79															
100		22x36	1.03	25x26	1.03					22x31	1.03	25x26	1.03							
		22x31	0.96																	
120		22x36	1.12	25x31	1.12					22x36	1.10	25x31	1.10							
		22x31	1.04	25x26	1.04															
150		22x41	1.32	25x36	1.32	30x31	1.32			22x41	1.30	25x36	1.30	30x26	1.30					
		22x36	1.34	25x31	1.34	30x26	1.34			22x36	1.13	25x31	1.13	30x21	1.13					
180				25x41	1.48	30x31	1.48			22x46	1.45	25x41	1.45	30x31	1.45					
		22x36	1.4	25x36	1.40	30x26	1.40			22x41	1.36	25x36	1.36	30x26	1.36					
220				25x46	1.75	30x36	1.75	35x32	1.75	22x51	1.65	25x46	1.65	30x36	1.65	35x27	1.65			
		22x41	1.65	25x41	1.65	30x31	1.65	35x27	1.65			25x41	1.55	30x31	1.55					
270				25x51	1.98	30x41	1.98	35x37	1.98			25x51	1.90	30x41	1.90	35x32	1.90			
		22x46	1.88	25x46	1.88	30x36	1.88	35x32	1.88			25x46	1.80	30x36	1.80					
330				25x51	2.15	30x41	2.15	35x42	2.27			25x56	2.20	30x41	2.20	35x37	2.20			
								35x47	2.52							35x32	2.10			
390				25x56	2.40	30x46	2.40	35x42	2.40							35x42	2.40	40x32	2.40	
						30x51	2.50	35x47	2.50							35x37	2.30			
470						30x51	2.50	35x47	2.50							35x47	2.75	40x37	2.75	
																35x42	2.60			
560						30x56	2.98	35x52	2.98							35x52	2.90	40x42	2.90	
																35x47	2.78			
680								35x57	3.20							35x57	3.0	40x47	3.0	
																35x63	3.2	40x57	3.2	

Ripple Current (A, rms) at 85°C 120Hz

## LU Series Snap-in Type 85°C

LP Long life → LU



### Features

- ◆ Endurance 3000 hours 85°C
- ◆ RoHS compliant

### Specifications

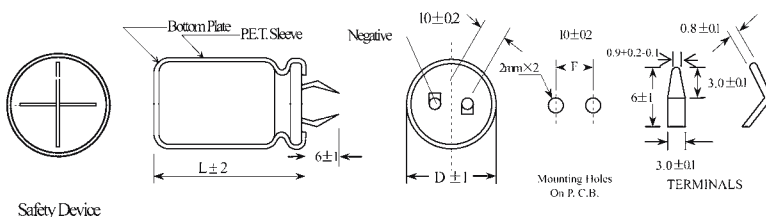
Item	Performance Characteristics						
Operating Temperature Range	-40 to +85°C	-25 to +85°C					
Capacitance Range	820 to 47000uF	56 to 2700uF					
Rated Voltage Range	16 to 100VDC	160 to 450VDC					
Capacitance Tolerance	±20%(120Hz,+20°C)	±20%(120Hz,+20°C)					
Leakage Current (+20°C,max.)	$I \leq 3 \sqrt{CV}$ (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 (µF) / W.V.(V)	16	25~35	50~63	80~100	160~250	315~450
	56~390	-	-	-	-	15	20
	470~3900	25	20	20	20	15	20
	4700~8200	35	30	30	25	-	-
	10000~22000	40	35	30	25	-	-
27000~47000	45	40	35	-	-	-	
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 :+85°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 :+85°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.						

Snap-in

### 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)



## Case Size

φ DxL(mm)

WV (V) Cap(μF)	16		25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1800									22x26	1.90
2200							22x26	1.93	22x31	2.00
2700							22x31	2.21	22x36	2.50
3300							22x31	3.41	22x36	2.72
3900					22x26	2.22	22x36	2.72	22x41	3.09
4700					22x31	2.46	22x41	3.02	22x51	3.69
5600			22x26	2.31	22x36	2.79	22x46	3.43	25x46	4.01
6800			22x31	2.56	22x41	2.97	22x51	3.94	25x50	4.52
8200	22x26	2.56	22x36	2.86	22x46	3.47	25x46	4.44	30x46	5.12
10000	22x31	2.98	22x36	3.31	22x51	3.75	30x41	5.08	30x51	5.78
12000	22x31	3.13	22x41	3.77	25x46	4.15	30x51	5.72	35x47	6.47
15000	25x31	3.64	25x41	4.1	30x41	4.8				
18000	25x36	3.98	30x36	4.66	35x42	5.71				
22000	25x51	4.52	25x51	5.19	35x47	6.38				
27000	30x36	4.95	35x42	6.02						
33000	30x41	5.60								
39000	30x46	6.21	35x52	7.56						
47000	30x51	6.93								

Ripple Current(A rms) at 85°C /120Hz

φ DxDL(mm)

WV (V) Cap(μF)	80		100		160		200		250	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
220									22x26	1.26
270							22x26	1.39	22x26	1.50
330							22x26	1.51	22x31	1.66
									25x26	1.61
390					22x26	1.63	22x31	1.73	22x36	1.88
							25x26	1.71	25x31	1.88
470					22x31	1.9	22x31	1.93	22x36	2.10
					25x26	1.86	25x26	1.95	25x36	2.15
									30x26	2.04
560					22x31	2.15	22x36	2.18	22x41	2.48
					25x26	2.15	25x31	2.15	25x36	2.35
							30x26	2.15	30x26	2.35
680					22x36	2.35	22x41	2.48	25x41	2.67
					25x31	2.33	25x31	2.48	30x31	2.71
					30x26	2.33	30x26	2.48		
820			22x26	1.86	22x41	2.68	22x46	2.81	25x46	3.01
					25x31	2.65	25x36	2.78	30x35	2.98
					30x26	2.64	30x31	2.80	35x32	2.96
1000			22x31	2.02	22x46	3.02	22x51	3.28	30x41	3.56
					25x36	3	25x41	3.28	35x37	3.48
					30x31	2.96	30x36	3.15		
1200	22x26	1.77	22x31	2.12	25x41	3.43	30x36	3.61	30x46	3.99
			25x26	2.11	30x31	3.41	35x32	3.57	35x37	3.84
					35x27	3.4				
1500	22x31	2.01	22x36	2.45	25x51	3.96	30x46	4.13	35x42	4.33
			25x31	2.47	30x36	3.96	35x37	4.06		
			30x26	2.56	35x32	3.94				
1800	22x31	2.11	22x41	2.77	30x41	4.31	30x51	4.60	35x52	4.54
	25x26	2.26	25x36	2.81	35x37	4.28	35x42	4.59		
			30x26	2.65						
2200	22x36	2.53	22x46	3.15	30x51	4.96	35x47	5.25		
	25x31	2.53	25x41	3.21	35x42	4.96				
	30x26	2.56	30x31	3.17						
2700	22x41	2.93	25x46	3.66	35x47	5.57				
	25x36	2.93	30x36	3.65						
	30x31	2.91	35x32	3.77						
3300	22x46	3.23	25x51	4.15						
	25x41	3.29	30x41	4.18						
	30x31	3.25	35x37	4.07						
3900	22x51	3.62	30x46	4.67						
	25x46	3.71	35x37	4.61						
	30x36	3.70								
4700	25x51	4.28	30x51	5.26						
	30x41	4.23	35x42	5.23						
	35x32	4.12								
5600	30x46	4.70	35x47	5.88						
	35x37	4.64								
6800	30x51	5.27	35x52	6.01						
	35x42	5.24								

Ripple Current(A rms) at 85°C /120Hz

Snap-in

φ DxL(mm)

WV (V) Cap(μF)	350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple
68					22x26	0.71
82			22x26	0.84	22x26	0.86
100			22x26	0.95	22x31	0.95
					25x26	0.97
120	22x26	1.04	22x31	1.09	22x36	1.07
			25x26	1.13	25x31	1.09
					30x26	1.12
150	22x31	1.2	22x36	1.24	22x41	1.18
	25x26	1.22	25x31	1.27	25x31	1.25
					30x26	1.29
180	22x31	1.34	22x41	1.41	22x46	1.32
	25x26	1.37	25x31	1.44	25x36	1.40
			30x26	1.52	30x31	1.45
220	22x36	1.47	22x46	1.58	25x41	1.59
	25x31	1.53	25x36	1.64	30x31	1.64
	30x26	1.54	30x31	1.66	35x27	1.59
270	22x41	1.7	25x41	1.79	30x36	1.89
	25x36	1.73	30x31	1.82	35x32	1.90
	30x26	1.8				
330	22x46	1.87	25x46	2	30x41	2.12
	25x36	1.97	30x36	2.05	35x37	2.15
	30x31	2.03	35x32	2.05		
390	25x41	2.14	30x41	2.26	30x46	2.35
	30x36	2.23	35x37	2.28	35x42	2.38
	35x32	2.3				
470	25x51	2.55	30x46	2.51	35x47	2.68
	30x36	2.53	35x37	2.51		
	35x32	2.55				
560	30x41	2.73	30x51	2.85	35x52	2.88
	35x37	2.75	35x42	2.85		
680	30x51	3.15	35x52	3.1		
	35x42	3.15				
820	35x47	3.47				
1000	35x52	3.6				
1200						
1500						

Ripple Current(A rms) at 85°C /120Hz