

LU Series Snap-in Type 85°C

LP **Long life** → LU



Features

- ◆ Load life 3000 hours 85°C
- ◆ RoHS compliant
- ◆ For detail specifications, please refer to Engineering Bulletin No. E180

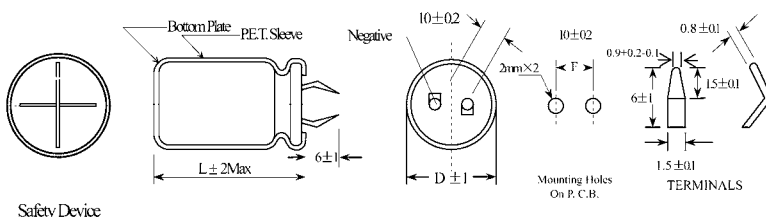
Specifications

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.)	$I \leq 3 \sqrt{CV} (\mu A)$ (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	-	-		
Load Life	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 Load life. 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)



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									25x26	35.00
3300							22x31	2.21	22x36	2.50
3900									25x31	2.52
4700							22x31	3.41	22x36	2.72
5600							25x26	2.38	25x31	2.74
6800									30x26	2.84
8200					22x26	2.22	22x36	2.72	22x41	3.09
10000							25x31	2.68	25x36	3.13
12000									30x31	3.09
15000					22x31	2.46	22x41	3.02	22x51	3.69
18000					25x26	2.43	25x31	3.07	25x41	3.59
22000							30x26	3.01	30x31	3.54
27000			22x26	2.31	22x36	2.79	22x46	3.43	25x46	4.01
33000					25x31	2.75	25x36	3.47	30x36	4.00
39000							30x31	3.43	35x32	3.75
47000			22x31	2.56	22x41	2.97	22x51	3.94	25x50	4.52
			25x26	2.47	25x31	2.89	25x41	3.87	30x41	4.55
					30x26	3.09	30x36	3.93	35x32	4.44
	22x26	2.56	22x36	2.86	22x46	3.47	25x46	4.44	30x46	5.12
			25x26	2.78	25x36	3.33	30x36	4.47	35x37	5.05
					30x31	3.29	35x32	4.41		
	22x31	2.98	22x36	3.31	22x51	3.75	30x41	5.08	30x51	5.78
			25x31	3.16	25x41	3.65	35x37	4.92	35x42	5.75
					30x31	3.61				
	22x31	3.13	22x41	3.77	25x46	4.15	30x51	5.72	35x47	6.47
	25x26	3.01	25x36	3.63	30x36	4.14	35x42	5.69		
			30x26	3.8	35x32	4.27				
	22x36	3.69	22x51	4.21	25x51	4.8	35x47	6.56		
	25x31	3.64	25x41	4.1	30x41	4.8				
	30x26	3.73	30x31	4	35x37	4.95				
	22x41	3.98	25x46	4.68	30x46	5.3				
	25x36	3.98	30x36	4.66	35x42	5.71				
	30x31	3.88	35x32	4.68						
	22x51	4.52	25x51	5.19	35x47	6.38				
	25x41	4.44	30x41	5.33						
	30x31	4.38	35x37	5.26						
	25x46	4.98	30x46	6.02	35x52	6.9				
	30x36	4.95	35x42	6.02						
	35x32	4.82								
	25x51	5.49	35x47	6.75						
	30x41	5.60								
	35x32	5.46								
	30x46	6.21	35x52	7.56						
	35x37	6.12								
	30x51	6.93								
	35x42	6.89								

Ripple Current(A rms) at 85°C /120Hz

φ DxDL(mm)

WV (V) Cap(uF)	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
560									30x26	2.04
					22x31	2.15	22x36	2.18	22x41	2.48
					25x26	2.15	25x31	2.15	25x36	2.35
680							30x26	2.15	30x26	2.35
					22x36	2.35	22x41	2.48	25x41	2.67
					25x31	2.33	25x31	2.48	30x31	2.71
820					30x26	2.33	30x26	2.48		
			22x26	1.86	22x41	2.68	22x46	2.81	25x46	3.01
					25x31	2.65	25x36	2.78	30x35	2.98
1000					30x26	2.64	30x31	2.80	35x32	2.96
			22x31	2.02	22x46	3.02	22x51	3.28	30x41	3.56
					25x36	3	25x41	3.28	35x37	3.48
1200					30x31	2.96	30x36	3.15		
	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
1500					35x27	3.4				
	22x31	2.01	22x36	2.45	25x51	3.96	30x46	4.13	35x42	4.33
			25x31	2.47	30x36	3.96	35x37	4.06		
1800			30x26	2.56	35x32	3.94				
	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		
2200			30x26	2.65						
	22x36	2.53	22x46	3.15	30x51	4.96	35x47	5.25		
	25x31	2.53	25x41	3.21	35x42	4.96				
2700			30x31	3.17						
	22x41	2.93	25x46	3.66	35x47	5.57				
	25x36	2.93	30x36	3.65						
3300			30x31	3.77						
	22x46	3.23	25x51	4.15						
	25x41	3.29	30x41	4.18						
3900			30x31	4.07						
	22x51	3.62	30x46	4.67						
	25x46	3.71	35x37	4.61						
4700			30x36	3.70						
	25x51	4.28	30x51	5.26						
	30x41	4.23	35x42	5.23						
5600										
	35x32	4.12								
6800	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

φ DxL(mm)

WV (V) Cap(μF)	250		350		400		450	
	Size	Ripple	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	22x26	1.10	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	22x36	1.18	22x41	1.7	25x41	1.79	30x36	1.89
	25x26	1.18	25x36	1.73	30x31	1.82	35x32	1.90
			30x26	1.8				
330	22x41	1.30	22x46	1.87	25x46	2	30x41	2.12
	25x31	1.30	25x36	1.97	30x36	2.05	35x37	2.15
	30x26	1.30	30x31	2.03	35x32	2.05		
390	22x46	1.49	25x41	2.14	30x41	2.26	30x46	2.35
	25x36	1.49	30x36	2.23	35x37	2.28	35x42	2.38
	30x26	1.49	35x32	2.3				
470	22x51	1.65	25x51	2.55	30x46	2.51	35x47	2.68
	25x41	1.65	30x36	2.53	35x37	2.51		
	30x31	1.65	35x32	2.55				
	35x27	1.65						
560	25x46	1.80	30x41	2.73	30x51	2.85	35x52	2.88
	30x36	1.80	35x37	2.75	35x42	2.85		
	35x27	1.80						
680	25x51	2.00	30x51	3.15	35x52	3.1		
	30x41	2.00	35x42	3.15				
	35x32	2.00						
820	30x46	2.30	35x47	3.47				
	35x37	2.30						
1000	30x51	2.47	35x52	3.6				
	35x42	2.47						
1200	35x47	2.60						
1500	35x52	3.00						

Ripple Current(A rms) at 85°C /120Hz