

LU series

- No sparks against DC over-voltage
- Endurance: 2,000 hours at 105°C
- RoHS Compliant

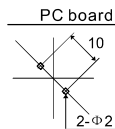
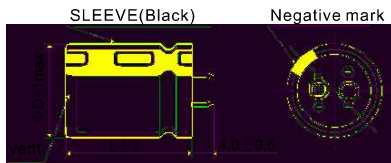


SPECIFICATIONS

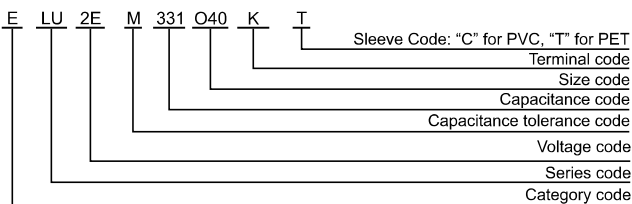
Items	Characteristics		
Category Temperature Range	-25~+105°C		
Rated Voltage Range	200~450V.DC		
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)		
Leakage Current	$I \leq 3\sqrt{CV}$ Where, I:Max.leakage current (µA), C:Nominal capacitance (µF), V: Rated voltage(V) (at 20°C after 5 minutes)		
ESL	50nH max. (at 20°C, 1MHz)		
Dissipation Factor (tanδ)	200V.DC:0.15 max.(0.02 max. for ΦD=35mm) 400V.DC:0.15 max. (at 20°C, 120Hz)		
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V.DC)	200~250	400~450
	Z(-25°C)/Z(+20°C)	4	8
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after DC voltage plus the rated ripple current is applied for 2,000 hours at 105 °C.		
	Capacitance Change	≤±20% of the initial value	
	D.F. (tanδ)	≤200% of the initial specified value	
	Leakage Current	≤The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied.		
	Capacitance Change	≤±15% of the initial value	
	D.F. (tanδ)	≤150% of the initial specified value	
	Leakage Current	≤200% of the initial specified value	

DIMENSIONS[mm]

- Terminal Code : K (Φ22 to Φ35) : Standard



PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Rated voltage(Vdc)	Freq.(Hz)			
	120	1k	10k	100k
200~250	1.00	1.32	1.45	1.50
400~450	1.00	1.30	1.41	1.43

The endurance of capacitors is shortened with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

Snap-in&Lug Terminal Type

LU series

STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (Arms/105°C, 120Hz)	Part Number
200(2D)	180	22x20	0.15	0.82	ELU2DM181O20KT
	220	22x20	0.15	0.90	ELU2DM221O20KT
	270	22x25	0.15	1.02	ELU2DM271O25KT
	330	22x30	0.15	1.20	ELU2DM331O30KT
		25x25	0.15	1.20	ELU2DM331P25KT
	390	22x30	0.15	1.35	ELU2DM391O30KT
		25x25	0.15	1.35	ELU2DM391P25KT
	470	22x35	0.15	1.45	ELU2DM471O35KT
		25x30	0.15	1.45	ELU2DM471P30KT
		30x25	0.15	1.47	ELU2DM471Q25KT
	560	22x40	0.15	1.62	ELU2DM561O40KT
		25x30	0.15	1.60	ELU2DM561P30KT
		30x25	0.15	1.60	ELU2DM561Q25KT
		25x35	0.15	1.82	ELU2DM681P35KT
	680	30x30	0.15	1.81	ELU2DM681Q30KT
		35x25	0.20	1.86	ELU2DM681R25KT
		25x45	0.15	2.11	ELU2DM821P45KT
	820	30x35	0.15	2.11	ELU2DM821Q35KT
		35x25	0.20	2.11	ELU2DM821R25KT
	1000	30x35	0.15	2.40	ELU2DM102Q35KT
35x30		0.20	2.40	ELU2DM102R30KT	
1200	30x45	0.15	2.69	ELU2DM122Q45KT	
	35x35	0.20	2.65	ELU2DM122R35KT	
250(2E)	120	22x20	0.15	0.68	ELU2EM121O20KT
	180	22x25	0.15	0.87	ELU2EM181O25KT
		25x20	0.15	0.93	ELU2EM181P20KT
	220	22x30	0.15	1.00	ELU2EM221O30KT
	270	22x35	0.15	1.14	ELU2EM271O35KT
		25x25	0.15	1.13	ELU2EM271P25KT
	330	30x20	0.15	1.25	ELU2EM271Q20KT
		22x40	0.15	1.28	ELU2EM331O40KT
	390	25x30	0.15	1.29	ELU2EM331P30KT
		22x45	0.15	1.42	ELU2EM391O45KT
	390	25x35	0.15	1.46	ELU2EM391P35KT
		30x25	0.15	1.52	ELU2EM391Q25KT

WV (Vdc)	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (Arms/105°C, 120Hz)	Part Number	
250(2E)	390	35x20	0.20	1.62	ELU2EM391R20KT	
	470	25x40	0.15	1.64	ELU2EM471P40KT	
		30x30	0.15	1.67	ELU2EM471Q30KT	
	560	25x45	0.15	1.82	ELU2EM561P45KT	
		30x35	0.15	1.87	ELU2EM561Q35KT	
		35x25	0.20	1.99	ELU2EM561R25KT	
	680	30x40	0.15	2.12	ELU2EM681Q40KT	
		35x30	0.20	2.19	ELU2EM681R30KT	
	820	30x45	0.15	2.39	ELU2EM821Q45KT	
		35x35	0.20	2.42	ELU2EM821R35KT	
400(2G)	56	22x20	0.15	0.45	ELU2GM560O20KT	
	68	22x20	0.15	0.51	ELU2GM680O20KT	
	82	22x25	0.15	0.58	ELU2GM820O25KT	
	100	22x25	0.15	0.66	ELU2GM101O25KT	
		25x25	0.15	0.66	ELU2GM101P25KT	
	120	22x30	0.15	0.76	ELU2GM121O30KT	
		25x25	0.15	0.76	ELU2GM121P25KT	
	150	22x35	0.15	0.85	ELU2GM151O35KT	
		25x30	0.15	0.85	ELU2GM151P30KT	
		30x25	0.15	0.85	ELU2GM151Q25KT	
	180	22x40	0.15	0.94	ELU2GM181O40KT	
		25x35	0.15	0.95	ELU2GM181P35KT	
		30x25	0.15	0.95	ELU2GM181Q25KT	
		25x35	0.15	1.24	ELU2GM221P35KT	
		220	30x30	0.15	1.24	ELU2GM221Q30KT
			35x25	0.15	1.24	ELU2GM221R25KT
	270	25x45	0.15	1.30	ELU2GM271P45KT	
		30x35	0.15	1.30	ELU2GM271Q35KT	
35x25		0.15	1.30	ELU2GM271R25KT		
330	30x40	0.15	1.47	ELU2GM331Q40KT		
	35x30	0.15	1.47	ELU2GM331R30KT		
450(2W)	180	30x35	0.20	1.00	ELU2WM181Q35KT	
	220	30x40	0.20	1.20	ELU2WM221Q40KT	
	390	35x40	0.20	1.60	ELU2WM391R40KT	

DC OVERVOLTAGE TEST CONDITIONS

The vent will operate and the capacitor shall become open-circuited without burning materials when the following excess DC voltage is applied.

Test DC voltage

Rated Voltage	Nominal Capacitance	Current Limit	Test DC Voltage
200Vdc	<330μF	4A	300/375Vdc
	330μF ≤ C < 470μF	5A	
	≥ 470μF	7A	
250Vdc	<100μF	4A	350/450Vdc
	100μF ≤ C < 220μF	5A	
	≥ 220μF	7A	
400Vdc	<100μF	2A	500/600Vdc
	100μF ≤ C < 220μF	4A	
	≥ 220μF	7A	
450Vdc	<100μF	2A	550/675Vdc
	100μF ≤ C < 220μF	4A	
	≥ 220μF	7A	

Test Circuit

