

L7 series

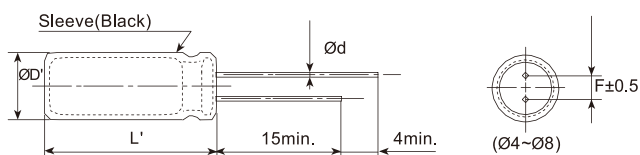
- Miniature series with 7mm height
- Endurance : +105 °C 2,000 hours
- Wide temperature range of -40°C to +105°C
- **RoHS Compliant**



SPECIFICATIONS

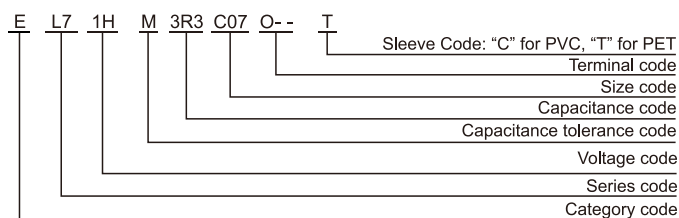
Items	Characteristics								
Category Temperature Range	-40~+105°C								
Rated Voltage Range	6.3~63 V _{dc}								
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)								
Leakage Current	I ≤ 0.01CV or 3μA, whichever is greater. Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)								
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	(at 20°C, 120Hz)
	tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	(at 120Hz)
	Z(-25°C)/Z(+20°C)	4	3	2					
	Z(-40°C)/Z(+20°C)	8	6	4	3				
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage 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	≤±20% of the initial value							
	D.F. (tanδ)	≤200% of the initial specified value							
	Leakage Current	≤200% of the initial specified value							

DIMENSIONS[mm]



ØD	4	5	6.3	8
Ød	0.45	0.45	0.5	0.5
F	1.5	2.0	2.5	3.5
ØD'	ØD+0.5max.			
L'	L+2max.			

PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

WV(V _{dc}) \ Freq.(Hz)	50/60	120	1k	10k-100k
6.3 to 16	0.80	1.00	1.30	1.50
25 to 35	0.80	1.00	1.20	1.20
≥50	0.80	1.00	1.15	1.20

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.

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■ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (mA _{rms} /105°C, 120Hz)
6.3(0J)	22	4*7	0.22	28
	33	4*7	0.22	32
		5*7	0.22	35
	47	5*7	0.22	47
	68	5*7	0.22	50
	100	6.3*7	0.22	75
	220	8*7	0.22	92
10(1A)	22	4*7	0.19	32
	33	5*7	0.19	48
	47	5*7	0.19	51
	68	6.3*7	0.19	68
	100	6.3*7	0.19	80
			8*7	0.19
	220	8*7	0.19	130
16(1C)	10	4*7	0.16	28
	22	4*7	0.16	35
		5*7	0.16	42
	33	5*7	0.16	50
	47	6.3*7	0.16	67
	68	6.3*7	0.16	70
		8*7	0.16	78
100	8*7	0.16	110	
25(1E)	4.7	4*7	0.14	17
	6.8	4*7	0.14	19
	10	4*7	0.14	28
		5*7	0.14	33
	22	5*7	0.14	43
		6.3*7	0.14	45
	33	6.3*7	0.14	62
	47	8*7	0.14	75
	68	8*7	0.14	80
	100	8*7	0.14	115

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (mA _{rms} /105°C, 120Hz)
35(1V)	4.7	4*7	0.12	22
	6.8	4*7	0.12	24
		5*7	0.12	28
	10	5*7	0.12	35
	22	6.3*7	0.12	60
	33	6.3*7	0.12	50
		8*7	0.12	68
	47	8*7	0.12	80
	68	8*7	0.12	85
50(1H)	0.1	4*7	0.10	1.5
	0.22	4*7	0.10	2.5
	0.33	4*7	0.10	3.5
	0.47	4*7	0.10	5
	0.68	4*7	0.10	7
	1	4*7	0.10	10
	2.2	4*7	0.10	20
	3.3	4*7	0.10	26
	4.7	4*7	0.10	27
			5*7	0.10
	10	6.3*7	0.10	38
	22	8*7	0.10	63
	33	8*7	0.10	78
63(1J)	0.1	4*7	0.09	1.5
	0.22	4*7	0.09	2.5
	0.33	4*7	0.09	3.5
	0.47	4*7	0.09	6
	1	4*7	0.09	12
	2.2	4*7	0.09	20
	3.3	5*7	0.09	28
	4.7	6.3*7	0.09	33
	10	6.3*7	0.09	40
	22	8*7	0.09	65