



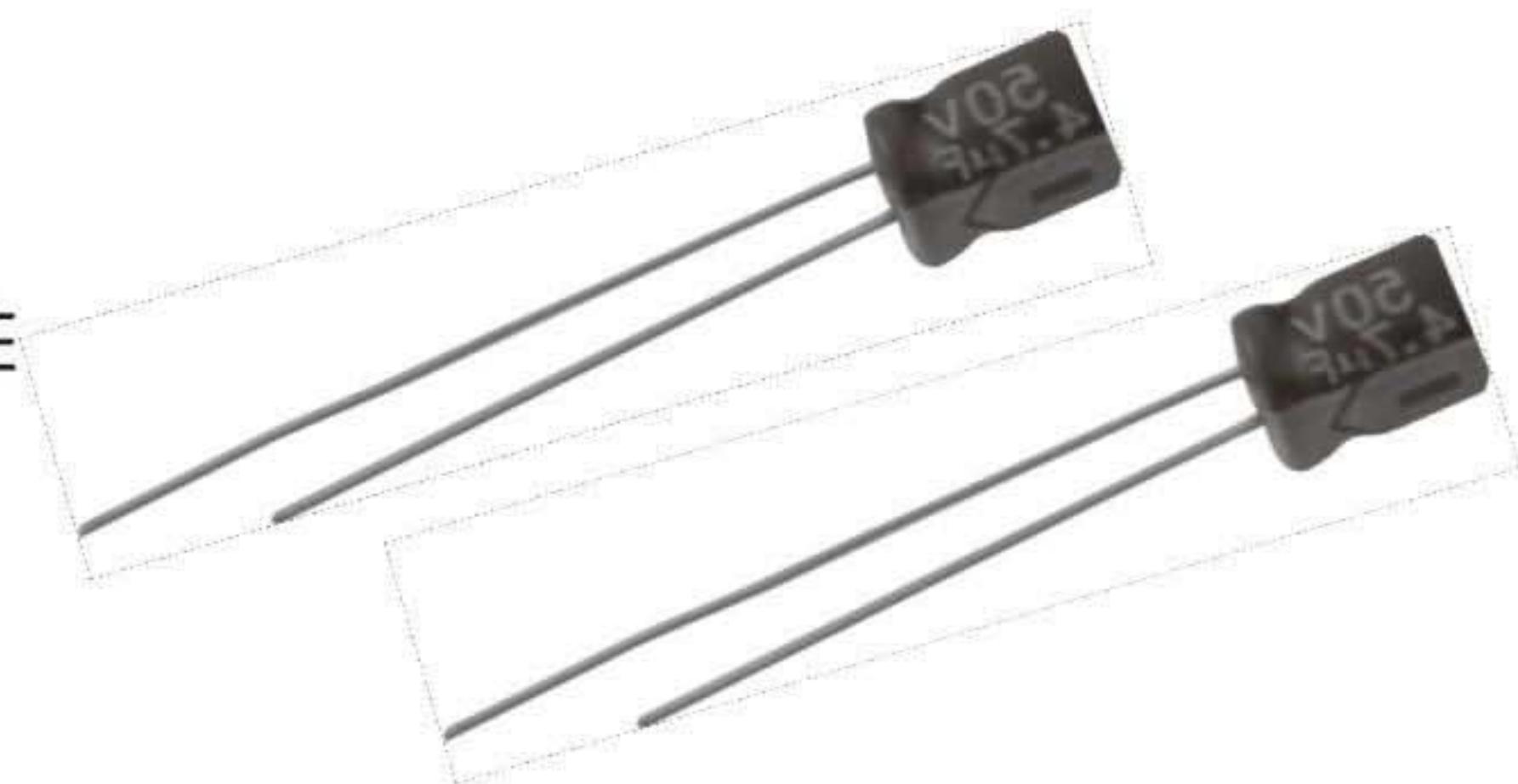
MINIATURIZED L.L. TYPE CAPACITORS -40°C~85°C 1000HR

MLR Series 7 mm,Low Leakage Current 低泄漏電流小型品

Features

在常溫或高溫無負荷狀況下經長期放置後，尚能保持穩定之低漏泄電流特性

- Low leakage current, height 7 mm



Specifications

No	Item	Performance Characteristics						
1	使用溫度範圍 Operating Temperature Range	-40 to + 85°C						
2	定格電壓範圍 Rated Voltage Range	6.3 to 50 VDC						
3	靜電容量範圍 Capacitance Range	0.1 to 470uF						
4	靜電容量容許差 Capacitance Tolerance	±20%(120Hz,+20°C)						
5	漏電電流 Leakage Current(+20°C,max)	I ≤ 0.002 CV or 0.4(μA) After 2 minutes, whichever is greater measured with rated working voltage applied.						
6	損失角 Dissipation Factor(tanδ)	Working Voltage (VDC)	6.3	10	16	25	35	50
		D.F. (%)Max	24	20	16	14	12	10
		(+20°C,at 120Hz)						
7	溫度特性 Low Temperature Characteristics (120Hz)	Working Voltage (VDC)	6.3	10	16	25	35	50
		Z-40°C/Z+20°C	8	6	4	4	3	3
8	高温負荷特性 Load Life	Test conditions Duration time Ambient temperature Applied voltage After test requirements at +20°C Capacitance change Dissipation factor Leakage current	:1000Hrs :+85°C :Rated DC working voltage :≤ ±20% of the initial measured value :≤200% of the initial specified value (4V : ≤ ±30%) :≤The initial specified value					
9	高温無負荷特性 Shelf Life	Test conditions Duration time Ambient temperature Applied voltage	:500Hrs :+85°C :None					
		After test requirements at +20°C : Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.						

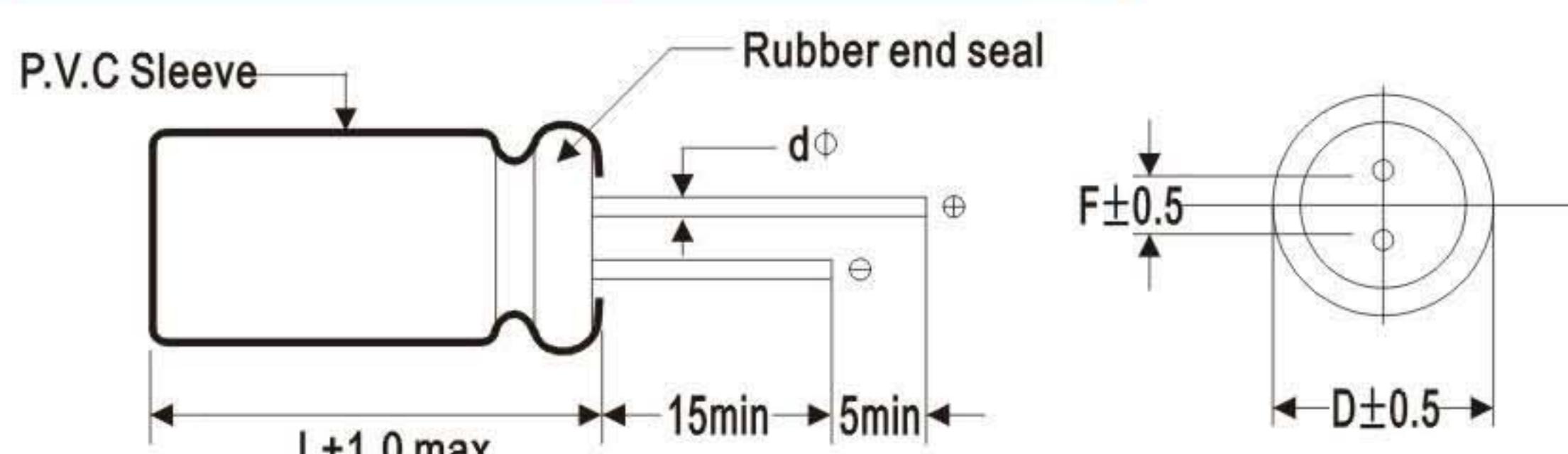
Multiplier for Ripple Current vs. Frequency

CAP(μ F)\Hz	50(60)	120	400	1K	10K	50K-100K
CAP≤10	0.8	1	1.30	1.45	1.65	1.70
Multiplier 10<CAP≤100	0.8	1	1.23	1.36	1.48	1.53
100<CAP≤1000	0.8	1	1.16	1.25	1.25	1.38

Multiplier for Ripple Current vs. Temperature

Temperature°C	45	60	70	85
Multiplier	1.8	1.50	1.30	1.0

Outline drawing :(Unit:mm)



DΦ	4	5	6.3	8
F	1.5	2.0	2.5	3.5
dΦ	0.45		0.5	

Case Size

WV(SV) \ μ F	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1						4×7
0.22						4×7
0.33						4×7
0.47						4×7
1						4×7
2.2						4×7
3.3						4×7
4.7					4×7	5×7
10			4×7	5×7	5×7	6.3×7
22	4×7	5×7	5×7	6.3×7	6.3×7	8×7
33	5×7	5×7	6.3×7	6.3×7	8×7	8×7
47	5×7	6.3×7	6.3×7	8×7	8×7	8×9
100	6.3×7	8×7	8×7	8×9	-	-
220	8×7	8×7	8×9	-	-	-
330	8×7	8×9	-	-	-	-
470	8×9	-	-	-	-	-

Maximum Ripple Current

(MA,rms,120Hz at 85°C)

WV(SV) \ μ F	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1						0.8
0.22						2.0
0.33						3.1
0.47						4.5
1						8.0
2.2						16
3.3						21
4.7						21
10						25
22	31	35	40	48	52	58
33	40	44	53	59	65	75
47	48	55	60	73	85	90
100	70	90	95	110		
220	110	120	130			
330	120	140				
470	130					