

LVD series 105℃,High reliability, Low impedance

Features

- $\Phi 4 \sim \Phi 18$, 105℃, 2000~5000 hours assured
- Low impedance capacitors
- Available for high density surface mounting
- RoHS compliance and AEC-Q200 qualified

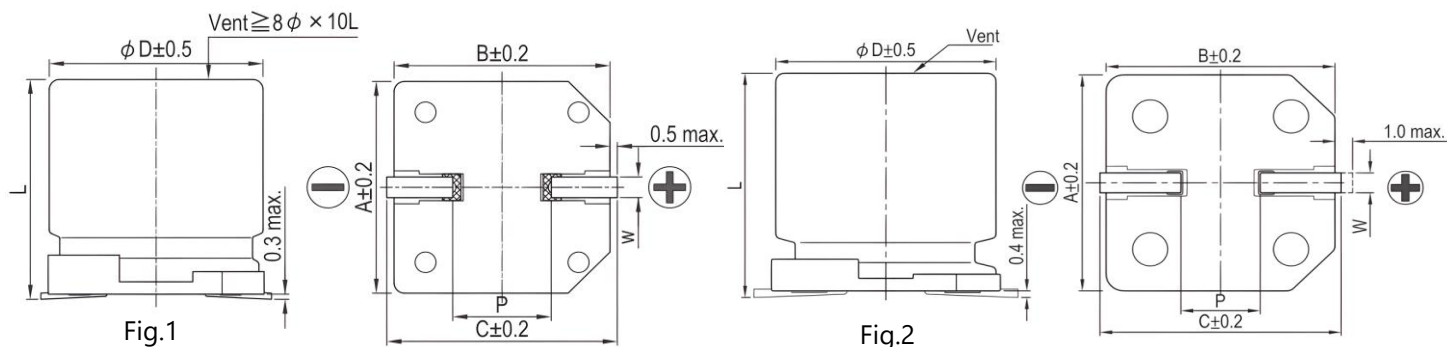
Marking color : Black

Specifications

Item	Performance Characteristics										
Temperature Range	-55~+105℃										
Rated Voltage Range	6.3~100Vdc										
Capacitance Range	1~8200μF										
Capacitance Tolerance	±20%（120Hz, +20℃）										
Leakage Current（+20℃,max.）	I≤0.01CV or 3.0（μA） After 2 minutes, whichever is greater measured with rated working voltage applied										
Dissipation Factor（tanδ） 120Hz, +20℃	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	80	100	
	D.F.(%)max.	30	26	22	16	13	10	8	8	7	
	For capacitance>1000μF , Add 2% per another 1000μF（120Hz, +20℃）										
Low Temperature Characteristics（120Hz）	Impedance ratio max.										
	Working Voltage(Vdc)		6.3	10	16	25	35	50	63	80	100
	Impedance Ratio	Z(-25℃)/ Z(+20℃)	4	3	2	2	2	2	2	2	2
		Z(-55℃)/ Z(+20℃)	8	5	4	3	3	3	3	3	3
For capacitance>1000μF , Add 0.5 per another 1000μF For Z-25℃/ Z+20℃,Add 1.0 per another 1000μF For Z-55℃/ Z+20℃											
Endurance	Test Time		2000 Hrs for φD≤6.3mm &8x6.5&10x7.7, 5000 Hrs for φD≥8.0mm								
	Capacitance Change		Within ±30% of the initial value								
	D.F.(tanδ)		Less than 300% of the initial specified value								
	Leakage Current		≤The initial specified value								
	The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2000~5000 hours at 105℃.										
Shelf Life	Capacitance Change		≤±30% of the initial value								
	D.F.(tanδ)		≤300% of the initial specified value								
	Leakage Current		≤The initial specified value								
	After storing the capacitors under no load at 105℃ for 1000 hours and then performing voltage treatment based on JISC 5101-4 clause 4.1 at 20℃.										
Ripple Current and Frequency Multipliers	Frequency (Hz)		50	120	300	1k	≥10k				
	Multiplier		0.60	0.70	0.75	0.85	1.00				
Others	JISC-5101(IEC 60384)										

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Diagram of Dimensions

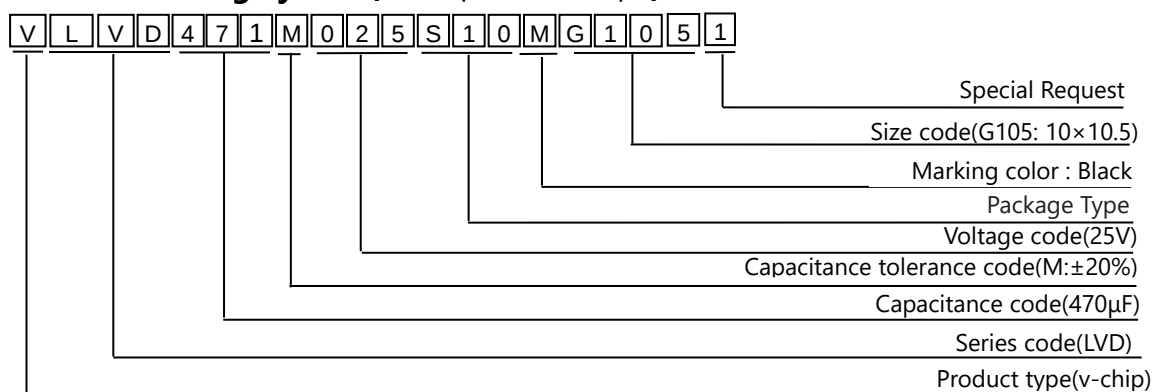


Lead Spacing and Diameter

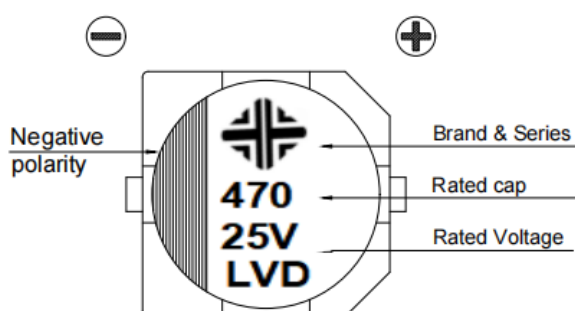
Unit:mm

Size code	ΦD	$L \pm 0.5$	A	B	C	W	$P \pm 0.2$	Fig.No.
B054	4	5.4	4.3	4.3	5.1	0.5~0.8	1.0	1
C054	5	5.4	5.3	5.3	5.9	0.5~0.8	1.5	1
E054	6.3	5.4	6.6	6.6	7.2	0.5~0.8	2.0	1
E077	6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.0	1
F065	8.0	6.5	8.3	8.3	9.0	0.5~0.8	2.3	1
F105	8.0	10.5	8.3	8.3	9.0	0.7~1.1	3.1	1
G077	10.0	7.7	10.3	10.3	11.0	0.7~1.1	4.7	1
G105	10.0	10.5	10.3	10.3	11.0	0.7~1.1	4.7	1
Z135	12.5	13.5	13.0	13.0	13.7	1.1~1.4	4.4	2
Z160	12.5	16.0	13.0	13.0	13.7	1.1~1.4	4.4	2
J165	16	16.5	17.0	17.0	18.0	1.1~1.4	6.4	2
J215	16	21.5	17.0	17.0	18.0	1.1~1.4	6.4	2
K165	18	16.5	19.0	19.0	20.0	1.1~1.4	6.4	2
K215	18	21.5	19.0	19.0	20.0	1.1~1.4	6.4	2

Part Numbering System(Example :25V 470 μ F)



Marking

 $\Phi D \leq 10 \text{ mm}$ 

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Dimension and Permissible Ripple Current

Dimension : $\phi D \times L$ (mm)

Ripple Current : mA/rms at 100k Hz, 105°C

Impedance : Ω / at 100k Hz, 20°C

WV(V)	Cap.(μ F)	Size code	ϕ DXL	Imp.	mA/rms	WV(V)	Cap.(μ F)	Size code	ϕ DXL	Imp.	mA/rms
63	22	B054	4X5.4	1.35	80	10	22	B054	4X5.4	1.35	80
	33	B054	4X5.4	1.35	80		33	C054	5X5.4	0.80	150
	47	C054	5X5.4	0.80	150		47	E054	6.3X5.4	0.44	230
	100	E054	6.3X5.4	0.44	230		100	E054	6.3X5.4	0.44	230
	150	E054	6.3X5.4	0.44	230		150	E054	6.3X5.4	0.44	230
	220	E054	6.3X5.4	0.44	230		220	E077	6.3X7.7	0.36	280
	220	E077	6.3X7.7	0.36	280		220	F065	8X6.5	0.36	280
	330	F065	8X6.5	0.36	280		330	F105	8X10.5	0.17	450
	330	F105	8X10.5	0.17	450		330	G077	10X7.7	0.17	450
	470	F105	8X10.5	0.17	450		470	F105	8X10.5	0.17	450
	470	G077	10X7.7	0.17	450		470	G077	10X7.7	0.17	450
	680	F105	8X10.5	0.17	450		680	G105	10X10.5	0.09	670
	680	G077	10X7.7	0.17	450		1000	G105	10X10.5	0.09	670
	1000	F105	8X10.5	0.17	450		1500	Z135	12.5X13.5	0.070	820
	1500	G105	10X10.5	0.09	670		2200	Z160	12.5X16	0.060	950
	2200	Z135	12.5X13.5	0.070	820		3300	J165	16X16.5	0.054	1260
	3300	Z160	12.5X16	0.060	950		4700	J165	16X16.5	0.054	1260
	4700	J165	16X16.5	0.054	1260		6800	K165	18X16.5	0.048	1500
	6800	K165	18X16.5	0.048	1500		6800	J215	16X21.5	0.038	1630
	6800	J215	16X21.5	0.038	1630		8200	K215	18X21.5	0.038	1750
	8200	K165	18X16.5	0.048	1500						
	8200	J215	16X21.5	0.038	1630						
16	10	B054	4X5.4	1.35	80	25	10	B054	4X5.4	1.35	80
	22	C054	5X5.4	0.80	150		22	C054	5X5.4	0.80	150
	33	E054	6.3X5.4	0.44	230		33	E054	6.3X5.4	0.44	230
	47	E054	6.3X5.4	0.44	230		47	E054	6.3X5.4	0.44	230
	100	E054	6.3X5.4	0.44	230		68	E054	6.3X5.4	0.44	230
	150	E077	6.3X7.7	0.36	280		100	E077	6.3X7.7	0.36	280
	150	F065	8X6.5	0.36	280		100	F065	8X6.5	0.36	280
	220	E077	6.3X7.7	0.36	280		150	F105	8X10.5	0.17	450
	330	F105	8X10.5	0.17	450		220	F105	8X10.5	0.17	450
	330	G077	10X7.7	0.17	450		220	G077	10X7.7	0.17	450
	470	F105	8X10.5	0.17	450		330	F105	8X10.5	0.17	450
	470	G105	10X10.5	0.09	670		470	G105	10X10.5	0.09	670
	680	G105	10X10.5	0.09	670		680	Z135	12.5X13.5	0.070	820
	1000	Z135	12.5X13.5	0.070	820		1000	Z160	12.5X16	0.060	950
	1500	Z160	12.5X16	0.060	950		1500	J165	16X16.5	0.054	1260
	2200	J165	16X16.5	0.054	1260		2200	J165	16X16.5	0.054	1260
	3300	J165	16X16.5	0.054	1260		3300	K165	18X16.5	0.048	1500
	3300	J215	16X21.5	0.038	1630		3300	J215	16X21.5	0.038	1630
	4700	K165	18X16.5	0.048	1500		3300	K215	18X21.5	0.038	1750
	4700	J215	16X21.5	0.038	1630						

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Dimension and Permissible Ripple Current

Dimension : $\phi D \times L$ (mm)
 Ripple Current : mA/rms at 100k Hz, 105°C
 Impedance : Ω / at 100k Hz, 20°C

WV(V)	Cap.(μ F)	Size code	ϕ DXL	Imp.	mA/rms	WV(V)	Cap.(μ F)	Size code	ϕ DXL	Imp.	mA/rms
35	4.7	B054	4X5.4	1.35	80	50	1	B054	4X5.4	2.90	60
	10	C054	5X5.4	0.80	150		22	B054	4X5.4	2.90	60
	22	E054	6.3X5.4	0.44	230		33	B054	4X5.4	2.90	60
	33	E054	6.3X5.4	0.44	230		4.7	C054	5X5.4	1.52	85
	47	E054	6.3X5.4	0.44	230		10	E054	6.3X5.4	0.88	165
	68	F065	8X6.5	0.36	280		22	E054	6.3X5.4	0.88	165
	100	F105	8X10.5	0.17	450		33	E077	6.3X7.7	0.68	185
	150	F105	8X10.5	0.17	450		47	E077	6.3X7.7	0.68	185
	150	G077	10X7.7	0.17	450		47	F065	8X6.5	0.68	185
	220	F105	8X10.5	0.17	450		68	F105	8X10.5	0.34	369
	220	G105	10X10.5	0.09	670		100	F105	8X10.5	0.34	369
	330	G105	10X10.5	0.09	670		100	G105	10X10.5	0.18	553
	330	Z135	12.5X13.5	0.070	820		150	G105	10X10.5	0.18	553
	470	Z160	12.5X16	0.060	950		220	Z135	12.5X13.5	0.12	650
	680	Z160	12.5X16	0.060	950		330	Z135	12.5X13.5	0.12	650
	1000	J165	16X16.5	0.054	1260		470	J165	16X16.5	0.073	1000
	1500	K165	18X16.5	0.048	1500		680	J165	16X16.5	0.073	1000
	1500	J215	16X21.5	0.038	1630		1000	J165	16X16.5	0.073	1000
	2200	K215	18X21.5	0.038	1750		1000	K165	18X16.5	0.066	1500
							1500	K215	18X21.5	0.050	1620
63	4.7	C054	5X5.4	1.90	70	80	22	F105	8X10.5	1.30	130
	10	E054	6.3X5.4	1.20	130		33	F105	8X10.5	1.30	130
	22	E077	6.3X7.7	0.90	150		47	G105	10X10.5	0.70	200
	33	F105	8X10.5	0.50	280		100	G105	10X10.5	0.70	200
	47	F105	8X10.5	0.50	280		150	Z135	12.5X13.5	0.32	450
	100	G105	10X10.5	0.25	450		220	J165	16X16.5	0.17	650
	150	Z135	12.5X13.5	0.15	700		330	J165	16X16.5	0.17	650
	220	Z135	12.5X13.5	0.15	700		470	J215	16X21.5	0.15	900
	330	J165	16X16.5	0.082	900		680	K215	18X21.5	0.15	950
	470	J165	16X16.5	0.082	900						
	680	K165	18X16.5	0.080	1150						
	680	J215	16X21.5	0.080	1150						
	1000	K215	18X21.5	0.060	1250						
100	22	F105	8X10.5	1.30	130						
	33	G105	10X10.5	0.70	200						
	47	G105	10X10.5	0.70	200						
	100	Z135	12.5X13.5	0.32	450						
	150	J165	16X16.5	0.17	650						
	220	J165	16X16.5	0.17	650						
	220	K215	18X21.5	0.15	950						
	330	K165	18X16.5	0.15	850						
	330	J215	16X21.5	0.15	900						
	470	K215	18X21.5	0.15	950						

Above size is the standard size for our product, If you need special size please contact our sales offices.