

LV Series

Features

- ◆ 85°C standard, case diameter ϕ 4~ ϕ 10mm
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ RoHS Compliant



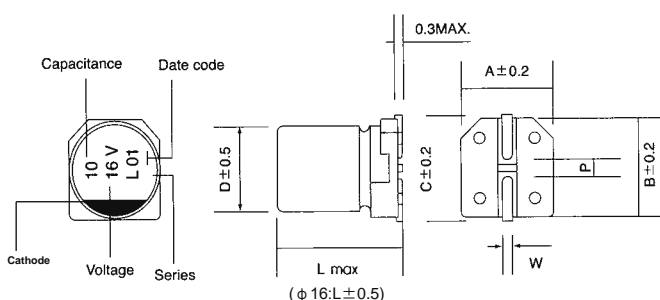
Specifications

Item	Performance Characteristics								
Operating Temperature Range	-40~ +85°C								
Rated Voltage Range	4~50 VDC								
Capacitance Range	0.1 to 6800 μ F								
Capacitance Tolerance	\pm 20%(120Hz,+20°C)								
Leakage Current (+20°C,max.)	I \leq 0.01 CV or 3 (μ A) After 2 minutes, whichever is greater measured with rated working voltage applied								
Dissipation Factor (tan δ , at 20°C , 120Hz)	Rated voltage(VDC)	4	6.3	10	16	25	35	50	
	D.F.(%)max	ϕ 4~6.3	42	30	22	18	16	14	14
		ϕ 8~10	45	34	26	20	16	14	14
		$\geq \phi$ 12.5	45	40	36	24	18	15	14
Low Temperature Characteristics (at 120Hz)	Impedance ratio max								
	Rated voltage(VDC)	4	6.3	10	16	25	35	50	
	Z-25°C / Z+20°C	7	4	3	2	2	2	2	
		Z-40°C / Z+20°C	15	8	8	4	4	3	3
Endurance	Test conditions								
	Duration time	:2000 Hrs							
	Ambient temperature	:+85°C							
	Applied voltage	:Rated DC working voltage							
	After test requirement at +20°C:								
	Capacitance change	:Within \pm 25% of the initial value							
	Dissipation factor	:Not more than 200% of specified value							
	Leakage current	:Not more than the specified value							
Shelf Life	Test conditions								
	Duration time	:1000 Hrs							
	Ambient temperature	:+85°C							
	Applied voltage	:None							
	After test requirement at +20°C	:Same limits as Endurance.							
	Pre-treatment for measurements	shall be conducted after application of DC working voltage for 30 minutes.							
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed under.								
	Leakage current	Less than specified value							
	Capacitance change	Within \pm 10% of initial value							
	tan δ	Less than specified value							

Multiplier for Ripple Current vs. Frequency

CAP(μ F) \ Frequency(Hz)	60(50)	120	500	1K	\geq 10K
0.1 \leq CAP \leq 100 μ F	0.8	1.0	1.20	1.30	1.50
100 < CAP	0.8	1.0	1.10	1.15	1.20

Diagram of Dimensions:(unit:mm)



ϕ D	L	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	6.1	6.6	6.6	7.2	0.5~0.8	2.2
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5
12.5	14	13.5	13.5	15.0	1.0~1.4	5.5
16	17	17.1	17.1	18.0	1.0~1.4	6.3

Case Size

φ DxL(mm)

WV(V) Cap(μF)	4		6.3		10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1													4X5.5	1.0
0.22													4X5.5	2.0
0.33													4X5.5	2.8
0.47													4X5.5	4.0
1													4X5.5	8.4
2.2													4X5.5	14
3.3													4X5.5	17
4.7													4X5.5	22
10					4X5.5	21	4X5.5	23	4X5.5	27	4X5.5	29	6.3X5.5	35
22			4X5.5	29	4X5.5 5X5.5	33 37	4X5.5	37	5X5.5 6.3X5.5	40	5X5.5 6.3X5.5	45 48	6.3x6.1 6.3X7.7 8X6.5	60 75 80
33			4X5.5 5X5.5	33 37	4X5.5 5X5.5	41 43	5X5.5	45	5X5.5 6.3X5.5	46 54	6.3X5.5	58	6.3X7.7 8X6.5	188 200
47	4X5.5	28	4X5.5 5X5.5	40 46	5X5.5	52	5X5.5 6.3X5.5	50 60	6.3X5.5 6.3x6.1	60 68	6.3X5.5 6.3x6.1 8X6.5	65 70 115	6.3X7.7 8X6.5	225 240
100	5x5.5	34	5X5.5 6.3x6.1	70 85	6.3X5.5	76	6.3X5.5 6.3x6.1	100 108	6.3X7.7 8X6.5	150 160	6.3X7.7 8X10.5	250 280	8X10.5	300
150	6.3x6.1	50	6.3x6.1	100	6.3x6.1	88	6.3x7.7	135	8x10.5	200	8x10.5	300	10x10.5	320
220	6.3X5.5	61	6.3x6.1 6.3X7.7 8X6.5	130 141 150	6.3X7.7 8X6.5	170 190	6.3X7.7 8X10.5	185 290	8X10.5	300	10X10.5	400	10X10.5	450
330	6.3X7.7 8X6.5	135 145	6.3X7.7 8X6.5	197 210	8X10.5	330	8X10.5	330	10X10.5	450	10X10.5	460	12.5x14	520
470	8X6.5 8X10.5	180 220	8X10.5	380	8X10.5	420	10X10.5	480	10X10.5	460	12.5x14	590	16x17	925
560	8X10.5	242	8X10.5	410	10X10.5	450	10X10.5	500	12.5x14	520	12.5x14	600		
680	8X10.5	285	8X10.5	460	10X10.5	480	10x10.5	550	12.5x14	580	12.5x14	610		
1000	10X10.5	370	10X10.5	500	10X10.5	510	12.5x14	600	12.5x14	660			16x17	940
1200	10X10.5	410	10X10.5	510			12.5x14	660						
1500	10X10.5	470	10X10.5	530			12.5x14	710			16x17	1060		
2200					12.5x14	730			16x17	1150				
3300			12.5x14	750			16x17	1200						
4700					16x17	1200								
6800			16x17	1330										

SMD

Ripple Current (mA, rms) at 85°C 120Hz