

VD

Series

Low Impedance



- Solvent proof (within 2 minutes)

VD
↑ Low Impedance

LZ

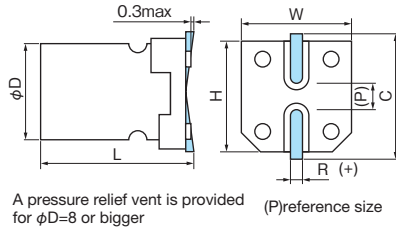
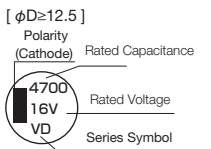
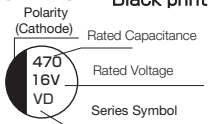
Specifications

Items	Condition	Specifications											
Rated voltage (V)	—	4	6.3	10	16	25	35	50	63	80	100		
Surge voltage (V)	Room temperature	5.0	8.0	13	20	32	44	63	79	95	125		
Category temperature range (°C)	—	-55 to +105											
Capacitance tolerance (%)	120Hz/20°C	M : ±20											
Dissipation Factor (tan δ)	tan δ (max) 120Hz/20°C	φ4 to φ10	0.35	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07	
		φ12.5 to φ16	0.40	0.38	0.34	0.30	0.28	0.22	0.18	0.16	0.16	0.14	
Leakage current (LC)	μA/after 2minutes (max)	Exceeding 1,000μF, +0.02 every 1,000μF The greater value of either 0.01CV or 3μA											
Impedance ratio at low temperature	Based on the value at 120Hz, +20°C	-25°C Z/Z _{20°C}	3	2	2	2	2	2	2	2	2	2	
		-55°C Z/Z _{20°C}	5	4	4	3	3	3	3	3	3	3	
Endurance	105°C, 2,000hours rated voltage applied (With the rated ripple current)	ΔC/C	Within ±20% of the initial value(≤10V:±30%)										
		tan δ	Less than 200% of the specified value(≤10V:≤300%)										
		LC	Less than the specified value										

Marking, Dimensions

(Unit : mm)

[φD≤10] Black print on the case top



D ^{±0.5}	L	W ^{±0.2}	H ^{±0.2}	C ^{±0.2}	R	P ^{±0.2}
4	5.4 ^{±0.4}	4.3	4.3	5.1	0.5 to 0.8	1.0
5	5.4 ^{±0.4}	5.3	5.3	6.1	0.5 to 0.8	1.3
6.3	5.4 ^{±0.4}	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7 ^{±0.4}	6.6	6.6	7.3	0.5 to 0.8	2.2
8	6.5 ^{±0.5}	8.3	8.3	9.2	0.7 to 1.2	3.1
8	10.5 ^{±0.5}	8.3	8.3	9.2	0.7 to 1.2	3.1
10	7.7 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
10	10.5 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
10	13.5 ^{±0.5}	10.3	10.3	11.2	0.7 to 1.2	4.4
12.5	13.5 ^{±0.5}	13.0	13.0	14.0	1.0 to 1.4	4.4
12.5	16.0 ^{±0.5}	13.0	13.0	14.0	1.0 to 1.4	4.4
16	16.5 ^{±0.5}	17.0	17.0	18.0	1.0 to 1.4	6.4

Ripple Current Frequency Coefficient

Frequency:F(Hz)		100≤F<1k	1k≤F<10k	10k≤F<100k	100k≤F
Capacitance:C(μF)	C≤33	0.35	0.70	0.90	1.00
	33<C≤150	0.40	0.85	0.92	1.00
	150<C	0.60	0.85	0.95	1.00

Size, Rated Ripple Current

μF	V	6.3			10			16			25			35		
10											4×5.4	1.6	80	5×5.4	1.3	150
15								4×5.4	2.2	80	5×5.4	1.6	150	5×5.4	1.3	150
22					4×5.4	2.6	80	5×5.4	2.2	80	5×5.4	1.6	80	5×5.4	1.3	80
27		4×5.4	3.0	80	5×5.4	2.6	150	5×5.4	2.2	150	6.3×5.4	1.6	230	6.3×5.4	1.3	230
33		5×5.4	3.0	150	5×5.4	2.6	150	6.3×5.4	2.2	230	6.3×5.4	1.6	230	6.3×5.4	1.3	230
47		5×5.4	3.0	150	6.3×5.4	2.6	230	6.3×5.4	2.2	230	6.3×5.4	1.6	230	6.3×5.4	1.3	230
56		5×5.4	3.0	150	6.3×5.4	2.6	230	6.3×5.4	2.2	230	6.3×5.4	1.6	230	6.3×7.7	1.3	280
68		6.3×5.4	3.0	230	6.3×5.4	2.6	230	6.3×5.4	2.2	230	6.3×5.4	1.6	230	6.3×7.7	1.3	280
100		6.3×5.4	3.0	230	6.3×5.4	2.6	230	6.3×5.4	2.2	230	6.3×7.7	1.6	280	8×10.5	1.3	300
150		6.3×5.4	3.0	230	6.3×5.4	2.6	230	8×6.5	2.2	280	6.3×7.7	1.6	450	8×10.5	1.3	300
								8×10.5	2.2	280						
220		6.3×5.4	3.0	230	6.3×7.7	2.6	280	6.3×7.7	2.2	280	8×10.5	1.6	450	8×10.5	1.3	450
					8×6.5	2.6	280									
330		6.3×7.7	3.0	280	8×10.5	2.6	450	8×10.5	2.2	450	8×10.5	1.6	450	10×10.5	1.3	670
		8×6.5	3.0	280												
470		8×10.5	3.0	450	8×10.5	2.6	450	8×10.5	2.2	450	10×10.5	1.6	670	10×10.5	1.3	670
680		8×10.5	3.0	450	10×10.5	2.6	670	10×10.5	2.2	670	10×10.5	1.6	670	12.5×13.5	1.3	820
1000		8×10.5	3.0	450	10×10.5	2.6	670	10×10.5	2.2	670	12.5×13.5	1.6	820	16×16.5	1.3	1260
1500		10×10.5	3.0	670	12.5×13.5	2.6	820	12.5×13.5	2.2	820	12.5×16.5	1.6	950	18×16.5	1.3	1500
2200		12.5×13.5	3.0	820	12.5×16.5	2.6	950	12.5×16.5	2.2	1260	16×16.5	1.6	1260	18×21.5	1.3	1750
3300		12.5×16.5	3.0	950	16×16.5	2.6	1260	16×16.5	2.2	1260	18×21.5	1.6	1260			
4700		16×16.5	3.0	1260	16×16.5	2.6	1260	18×16.5	2.2	1260						
6800		18×16.5	3.0	1500	18×16.5	2.6	1500									
8200		18×21.5	3.0	1750	18×21.5	2.6	1750									

 Case size: ϕ DxL(mm)

 Rated ripple current
 mA_{rms}(100kHz, 105°C)

 Impedance(Ω)
 max at 100kHz, 20°C

Size, Rated Ripple Current

μF \ V	50			63			80			100		
1.0	4x5.4	1.0	30									
2.2	4x5.4	1.0	30									
3.3	4x5.4	1.0	30									
4.7	5x5.4	1.0	85	5x5.4	0.8	70						
10	6.3x5.4	1.0	165	6.3x5.4	0.8	130						
15	6.3x5.4	1.0	165									
22	6.3x5.4	1.0	165	6.3x7.7	0.8	150	8x10.5	0.8	130	8x10.5	0.7	130
27	6.3x7.7	1.0	185									
33	6.3x7.7	1.0	185	8x10.5	0.8	280	8x10.5	0.8	130	10x10.5	0.7	200
47	6.3x7.7	1.0	185	8x10.5	0.8	280	10x10.5	0.8	200	10x10.5	0.7	200
	8x6.5	1.0	185									
56	8x10.5	1.0	300									
68	8x10.5	1.0	300									
100	8x10.5	1.0	300	10x10.5	0.8	450	10x10.5	0.8	200	12.5x13.5	0.7	450
150	10x10.5	1.0	550	12.5x13.5	0.8	700	12.5x13.5	0.8	450	12.5x16.5	0.7	550
220	10x10.5	1.0	550	12.5x13.5	0.8	700	12.5x16.5	0.8	550	16x16.5	0.7	650
										18x21.5	0.7	950
330	10x12.5	1.0	550	16x16.5	0.8	900	16x16.5	0.8	650	16x21.5	0.7	850
470	12.5x13.5	1.0	650	16x16.5	0.8	900	16x21.5	0.8	900	18x21.5	0.7	950
680	16x16.5	1.0	1000	16x21.5	0.8	1150	18x21.5	0.8	950			
1000	18x16.5	1.0	1500	18x21.5	0.8	1250						
1500	18x21.5	1.0	1620									

 Case size: ϕ DxL(mm)

 Impedance(Ω)
 max at 100kHz, 20°C

 Rated ripple current
 mA_{RMS}(100kHz, 105°C)