

Features

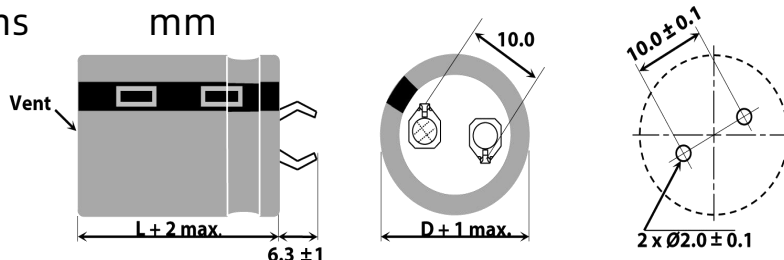
- ◎ 2000h at +85°C, 焊针型, Snap-in Type
- ◎ 宽电压, 大容量。Wide Voltage, Large capacitance



Specifications

Item	Characteristics								
使用温度范围 Operating Temperature Range(°C)	-40 ~ +85					-25 ~ +85			
额定电压 Rated Voltage (V)	10 ~ 400					450 ~ 500			
标称容量 Nominal capacitance (µF)	100 ~ 100,000								
容量偏差 Capacitance Tolerance(20°C,120Hz)	±20%								
漏电流 Leakage current (µA)	≤0.01CV or 1.5mA, which is smaller. (at 20°C ,after 5 minutes)								
损耗角正切值 Dissipation Factor(20°C,120Hz)	WV(V) Cap(µF)	10 ~16	25	35~50	63	80 ~100	WV(V) φ(mm)	160~200	250~500
	≤2700	-	-	0.2	0.15	0.15	22 ~ 30	0.1	0.15
	3300~4700	-	0.35	0.25	0.2	0.15			
	5600~6800	0.4	0.35	0.3	0.2	0.2	35	0.12	0.15
≥8200	0.4	0.35	0.35	0.25	-				
耐久性 Load Life(+85°C)	时间 time	2000小时2000 hours							
	容量变化率Capacitance change	±20%初始测量值以内 Within±20% of the initial value							
	漏电流Leakage current	≤初始规定值 Not more than the Initial specified value							
	损耗角正切值Dissipation factor	≤200%初始规定值 Not more than 200% of the Initial specified value							
高温贮存 Shelf Life(+85°C)	时间 time	500小时500 hours							
	容量变化率Capacitance change	±20%初始测量值以内 Within±20% of the initial value							
	漏电流Leakage current	≤初始规定值 Not more than the Initial specified value							
	损耗角正切值Dissipation factor	≤200%初始规定值 Not more than 200% of the Initial specified value							
	试验后: 施加标称电压30分钟, 于24至48小时之间测试。 After test: UR to be applied for 30 minutes, 24 to 48 hours before measurement.								

Dimensions



PC Board Mounting Holes

Frequency Coefficient

Frequency(Hz) Voltage	50,60	120	300	1k	≥10k
10 ~ 50	0.88	1.00	1.04	1.15	1.15
63 ~ 100	0.80	1.00	1.17	1.32	1.45
160 ~ 500	0.80	1.00	1.16	1.30	1.42

Temperature Coefficient

Frequency(Hz) Voltage	+40	+60	+70	+85
< 160	2.10	1.80	1.50	1.00
≥160	1.70	1.50	1.30	1.00

Standard Ratings

WV (SV)	Cap.	Max ESR	Typ ESR	Ripple Current	Size ϕ DxL
		20°C 120Hz		85°C 120Hz	
V	μ F	m Ω	m Ω	Arms	mm
10(13)	15000	66	46	1.99	22x30
	22000	55	39	2.28	22x40
	33000	44	31	2.64	25x40
	47000	37	26	3.04	25x50
	56000	30	21	3.4	30x50
	68000	25	17	3.81	35x40
	82000	20	14	4.3	35x50
16(20)	8200	17	12	4.74	22x30
	10000	14	10	5.27	22x40
	15000	11	8	5.79	25x50
	22000	9	6	6.58	30x40
	33000	6	4	7.2	30x50
	47000	4	2	8.35	30x50
	56000	65	45	2.14	35x50
	68000	53	37	2.4	35x50
	82000	44	31	2.69	35x70
100000	35	25	3.13	35x80	
25(32)	8200	30	21	3.54	22x40
	10000	24	17	4.24	22x40
	15000	20	14	4.75	25x40
	22000	16	11	5.39	30x40
	33000	12	9	5.83	35x40
	47000	9	6	6.24	35x50
	56000	99	69	1.78	35x60
35(44)	2200	83	58	2.02	22x30
	3300	68	48	2.28	22x40
	4700	57	40	2.6	25x30
	5600	46	33	2.92	25x30
	6800	39	27	3.28	25x40
	8200	31	22	3.74	25x40
	10000	26	18	4.16	30x40
	12000	21	15	4.92	30x40
	15000	16	12	5.61	30x50
	18000	12	9	6.23	30x50
	22000	8	7	6.86	35x50
	33000	121	84	2	35x60
	47000	85	59	2.56	35x80
50(63)	3300	71	50	2.81	25x40
	4700	59	41	3.37	25x40
	5600	49	34	3.71	25x50
	6800	40	28	4.09	30x50
	8200	33	23	4.5	30x50
	10000	26	17	4.95	30x50

WV (SV)	Cap.	Max ESR	Typ ESR	Ripple Current	Size ϕ DxL	
		20°C 120Hz		85°C 120Hz		
V	μ F	m Ω	m Ω	Arms	mm	
50(63)	12000	39	31	3.8	30x50	
	15000	31	25	4.5	30x50	
	18000	25	19	5.6	35x50	
	22000	19	13	6.8	35x50	
	2200	91	73	2	22x30	
63(79)	3300	81	65	2.3	22x40	
	4700	56	45	3	25x40	
	5600	48	38	3.1	25x50	
	6800	40	32	3.6	25x50	
	8200	41	33	3.8	30x40	
	10000	34	27	4.3	35x50	
	12000	28	23	4.8	35x60	
	15000	22	18	5.5	35x60	
	18000	16	14	6.2	35x80	
	22000	12	10	7.3	35x80	
80(100)	1500	133	107	1.7	22x40	
	2200	91	73	2.2	25x40	
	3300	61	49	2.8	25x50	
	4700	43	34	3.6	30x50	
	5600	48	38	3.8	30x50	
	6800	40	32	4.1	30x60	
	8200	41	33	4.7	35x50	
	10000	34	27	5.2	35x50	
	12000	28	23	5.8	35x70	
	15000	22	18	6.4	35x80	
100(125)	1000	200	160	1.4	22x30	
	1200	166	133	1.6	22x40	
	1500	133	107	1.8	22x40	
	2200	91	73	2.2	25x40	
	3300	61	49	3	30x50	
	4700	43	34	4	30x60	
	5600	32	21	5.2	35x50	
	6800	21	16	6.5	35x60	
	8200	15	8	7	35x60	
	10000	7	4	8.2	35x70	
	160(200)	470	283	226	1.6	22x40
		560	237	190	1.9	22x40
		680	196	157	2.1	22x50
820		162	130	2.4	25x40	
1000		133	107	2.7	25x50	
1500		89	71	3.7	30x40	
2200		73	58	4.5	35x50	
2700		59	45	5.7	35x50	

Standard Ratings

WV (SV)	Cap.	Max ESR	Typ ESR	Ripple Current	Size φDxL
		20°C 120Hz		85°C 120Hz	
V	μF	mΩ	mΩ	Arms	mm
160(200)	3300	45	32	6.9	35x60
	3900	33	19	7.8	35x70
	4700	20	8	8.9	35x80
200(250)	220	600	483	1.1	22x30
	330	402	322	1.4	22x30
	470	283	226	1.8	22x40
	560	237	190	2	22x50
	680	196	157	2.3	22x50
	820	162	130	2.6	25x50
	1000	133	107	3.1	30x45
	1200	111	89	3.4	30x50
	1500	107	85	3.8	35x50
	1800	90	76	4.5	35x50
	2200	72	60	5.1	35x50
	2700	58	47	6.3	35x60
	3300	43	32	7	35x80
250(300)	220	905	724	1.1	22x30
	330	603	483	1.4	22x40
	470	424	339	1.8	25x40
	560	356	285	2	25x50
	680	293	235	2.3	25x50
	820	243	195	2.6	30x40
	1000	199	160	3	30x50
	1200	166	133	3.4	35x50
	1500	137	118	3.8	35x60
315(365)	220	905	724	1.1	22x40
	330	603	483	1.4	25x50
	470	424	339	1.8	30x45
	560	356	285	2	30x50
	680	293	235	2.3	35x40
	820	228	196	2.8	35x45
	1000	156	147	3.2	35x50
350(400)	220	905	724	1.2	25x40
	330	603	483	1.6	25x40
	470	424	339	2	25x50
	560	356	285	2.3	30x50
	680	293	235	2.6	35x50
	820	243	195	2.8	35x50
	1000	198	145	3.2	35x60
	1200	137	98	3.4	35x70
1500	89	47	3.6	35x80	

WV (SV)	Cap.	Max ESR	Typ ESR	Ripple Current	Size φDxL
		20°C 120Hz		85°C 120Hz	
V	μF	mΩ	mΩ	Arms	mm
400(450)	100	1990	1592	0.7	22x30
	120	1658	1327	0.8	22x30
	150	1327	1062	0.9	22x35
	220	905	724	1.1	22x40
	330	603	483	1.6	25x50
	470	424	339	2.1	30x45
	560	356	285	2.3	35x45
	680	293	235	2.7	35x50
	820	242	194	3.1	35x60
	1000	199	107	3.7	35x60
	1200	147	58	4.3	35x70
	1500	96	17	4.9	35x80
	450(500)	100	1990	1592	0.73
150		1327	1062	1.0	22x40
220		905	724	1.2	25x40
330		603	480	1.7	30x50
470		424	339	2.2	35x50
560		356	285	2.4	35x50
680		293	235	2.8	35x60
820		242	194	3.2	35x70
1000		199	107	4.2	35x80
1200	145	37	4.6	35x80	
500(550)	100	1990	1592	0.9	25x30
	150	1327	1062	1.2	25x50
	220	905	724	1.6	30x50
	330	603	483	2.0	35x50
	470	424	339	2.6	35x60
	560	356	285	2.9	35x60
	680	293	235	3.2	35x70
	820	225	183	3.5	35x80