

TS09E

FEATURES

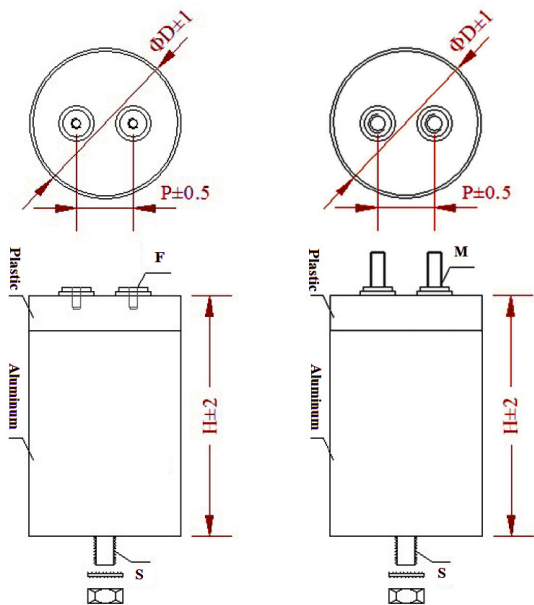
- Aluminum case with resin sealing. Flame retardant execution (UL94V-0)
- Non-inductive winding with metalized polypropylene film
- Low ESR & Low ESL
- High frequency and low dissipation factor, high stability

TYPICAL APPLICATION

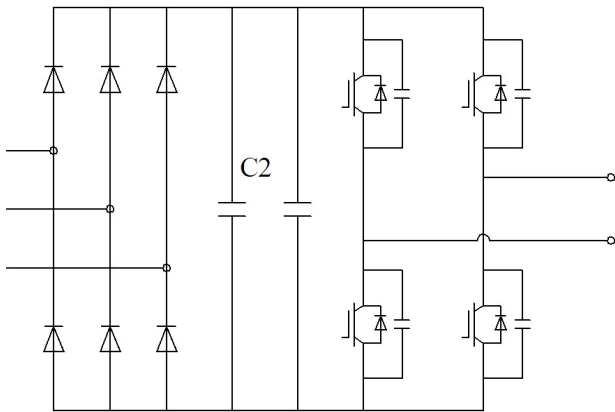
- Used in inverters of wind power and solar power
- Transportation: EV or HEV
- Welders, Elevators, Motor Driver systems



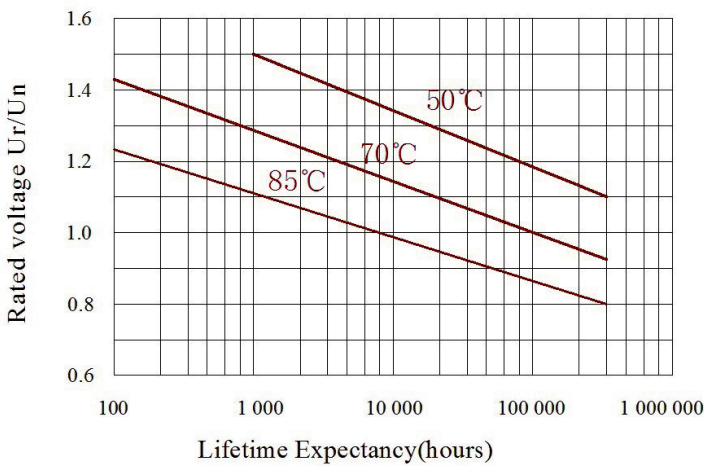
Outline Drawing



Typical circuit



Expected lifetime curve



TS09E

Technical Specifications

Item	Characteristics	
Reference standards	GB/T 17702 IEC 61071	
Capacitance	24μF ~5600μF	
Rated Voltage	500V.DC~1200V.DC	
Tolerance	±5% ±10%	
Dissipation factor	$\text{tg}\delta\leq 20\times 10^{-4}$ at 25°C±5°C,100Hz	
Insulation resistance	$C\cdot R\geq 5000\text{S}$,at 100V.DC,25°C±5°C,60s	
Operating temperature range	-40°C~85°C	
Test voltage between terminals	1.5Un (10S,25°C±5°C)	
Test voltage between terminals and case	Un < 1500V.DC, 3000V.AC(10S,50/60Hz,25°C±5°C) Un ≥ 1500V.DC, ($2\sqrt{\text{Un}}$ +1000)V.AC(10S,50/60Hz,25°C±5°C)	
Over voltage	1.1 Un	30% of the service period
	1.15 Un	30 min/day
	1.2 Un	5 min/day
	1.3 Un	1min/day
	1.5 Un	100ms no more than 1000 times
Max Altitude	2000m	
Expected lifetime	100 000hrs @ Un, θhs=70°C	
Failure rate	100FIT	

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 600V.DC									
480	76	95	1.5	45	5.6	1560	70	65	55
650	76	120	1.9	50	4.7	1560	70	63	53
780	76	140	2.2	55	4.6	1550	67	59	50
820	76	155	1.5	40	4.3	3060	70	70	62
950	76	175	1.5	45	4.2	3090	70	70	63
650	86	95	1.2	45	5.1	2120	70	70	64
880	86	120	1.5	50	4.7	2110	70	70	60
1000	86	136	1.8	55	4.6	2070	70	65	55
1100	86	140	1.7	55	4.6	2180	70	67	57
1100	86	155	1.4	40	4.4	4110	70	70	64
1300	86	175	1.4	45	4.3	4230	70	70	64
2000	86	265	1.1	55	3.0	6510	70	70	70
900	100	95	1.3	45	4.7	2900	70	70	58
1200	100	120	1.4	50	4.1	2850	70	70	58
1400	100	136	1.5	55	3.9	2870	70	70	58
1500	100	140	1.6	55	3.8	2740	70	70	58
1600	100	155	1.0	40	3.5	5920	70	70	70
1800	100	175	1.0	45	3.2	5800	70	70	70
1200	116	95	0.7	45	5.4	3900	80	80	80
1600	116	120	1.0	50	5.0	3830	80	80	70
2000	116	140	1.1	55	4.9	3960	80	80	67
2100	116	155	0.8	40	3.6	7840	100	100	92
2400	116	175	0.9	45	3.4	7810	100	100	90
3000	116	230	0.8	50	2.7	11200	100	100	100
5600	136	295	0.8	60	2.0	15940	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 700V.DC									
360	76	95	1.6	45	5.6	1560	70	63	53
480	76	120	2.1	50	4.7	1530	68	60	50
580	76	140	2.4	55	4.6	1530	64	56	48
620	76	155	1.5	40	4.3	3090	70	70	62
720	76	175	1.6	45	4.2	3120	70	70	61
480	86	95	1.3	45	5.1	2080	70	70	61
650	86	120	1.7	50	4.7	2080	70	66	56
750	86	136	2.0	55	4.6	2070	70	62	52
780	86	140	1.9	55	4.6	2060	70	63	53
820	86	155	1.4	40	4.4	4080	70	70	64
950	86	175	1.5	45	4.3	4120	70	70	62
1500	86	265	1.1	55	3.0	6500	70	70	70
650	100	95	1.4	45	4.7	2710	70	69	56
900	100	120	1.5	50	4.1	2760	70	69	56
1000	100	136	1.7	55	3.9	2650	70	67	55
1100	100	140	1.7	55	3.8	2790	70	68	56
1100	100	155	1.0	40	3.5	5260	70	70	70
1300	100	175	1.1	45	3.2	5420	70	70	70
920	116	95	0.7	45	5.4	3990	80	80	80
1200	116	120	1.0	50	5.0	3830	80	80	70
1500	116	140	1.1	55	4.9	3950	80	80	68
1500	116	155	0.8	40	3.6	7460	100	100	93
1800	116	175	1.0	45	3.4	7800	100	100	85
2300	116	230	0.8	50	2.7	11440	100	100	100
4200	136	295	0.8	60	2.0	15920	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 800V.DC									
290	76	95	1.7	45	5.6	1530	69	61	51
400	76	120	2.2	50	4.7	1530	66	58	49
480	76	140	2.5	55	4.6	1560	63	55	47
480	76	155	1.6	40	4.3	1540	70	70	60
560	86	175	1.7	45	4.2	2910	70	70	59
380	86	95	1.4	45	5.1	2960	70	70	59
520	86	120	1.8	50	4.7	2010	70	64	54
580	86	136	2.0	55	4.6	2020	70	62	52
630	86	140	2.1	55	4.6	1950	68	60	51
650	86	155	1.5	40	4.4	2030	70	70	62
750	86	175	1.6	45	4.3	3940	70	70	60
1100	86	265	1.2	55	3.0	3960	70	70	70
500	100	95	1.4	45	4.7	2620	70	67	55
700	100	120	1.6	50	4.1	2700	70	67	55
800	100	136	1.8	55	3.9	2660	70	66	54
850	100	140	1.8	55	3.8	2700	70	66	54
900	100	155	1.1	40	3.5	5400	70	70	70
1000	100	175	1.1	45	3.2	5230	70	70	70
720	116	95	0.8	45	5.4	3800	80	80	76
980	116	120	1.1	50	5.0	3810	80	79	67
1200	116	140	1.2	55	4.9	3860	80	77	65
1200	116	155	0.85	40	3.6	7280	100	100	90
1500	116	175	1.0	45	3.4	7920	100	100	85
1800	116	230	0.8	50	2.7	10910	100	100	100
3200	136	295	0.8	60	2.0	14780	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 900V.DC									
290	76	95	2.0	45	5.6	1530	63	56	47
400	76	120	2.6	50	4.7	1560	61	54	45
480	76	140	2.9	55	4.6	1540	58	51	43
480	76	155	1.7	40	4.3	2910	70	69	58
560	76	175	1.8	45	4.2	2960	70	68	58
380	86	95	1.6	45	5.1	2010	70	65	55
520	86	120	2.1	50	4.7	2020	68	60	50
580	86	136	2.2	55	4.6	1950	67	59	50
630	86	140	2.4	55	4.6	2030	64	56	48
650	86	155	1.5	40	4.4	3940	70	70	62
750	86	175	1.6	45	4.3	3960	70	70	60
1100	86	265	1.3	55	3.0	5810	70	70	70
500	100	95	1.4	45	4.7	2620	70	67	55
700	100	120	1.6	50	4.1	2700	70	67	55
800	100	136	1.8	55	3.9	2660	70	66	54
850	100	140	1.8	55	3.8	2700	70	66	54
900	100	155	1.1	40	3.5	5400	70	70	70
1000	100	175	1.1	45	3.2	5230	70	70	70
720	116	95	0.9	45	5.4	3800	80	80	71
980	116	120	1.2	50	5.0	3810	80	76	64
1200	116	140	1.4	55	4.9	3860	80	71	60
1200	116	155	0.9	40	3.6	7280	100	100	87
1500	116	175	1.1	45	3.4	7920	100	96	81
1800	116	230	0.8	50	2.7	10910	100	100	100
3200	136	295	0.8	60	2.0	14780	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 1000V.DC									
220	76	95	2.2	45	5.6	1460	60	53	45
300	76	120	2.9	50	4.7	1460	57	51	43
360	76	140	3.3	55	4.6	1450	54	48	41
360	76	155	1.9	40	4.3	2740	70	65	55
420	76	175	2.0	45	4.2	2780	70	65	55
290	86	95	1.8	45	5.1	1920	70	62	52
400	86	120	2.3	50	4.7	1950	65	57	48
470	86	136	2.2	55	4.6	1980	67	59	50
480	86	140	2.6	55	4.6	1930	61	54	46
500	86	155	1.6	40	4.4	3800	70	70	60
560	86	175	1.7	45	4.3	3710	70	69	58
900	86	265	1.3	55	3.0	5960	70	70	70
380	100	95	1.5	45	4.7	2490	70	65	53
500	100	120	1.8	50	4.1	2410	70	64	52
600	100	136	1.9	55	3.9	2500	70	63	52
650	100	140	1.9	55	3.8	2590	70	64	52
650	100	155	1.1	40	3.5	4890	70	70	70
780	100	175	1.1	45	3.2	5110	70	70	70
540	116	95	1.0	45	5.4	3570	80	80	68
740	116	120	1.4	50	5.0	3610	80	70	59
900	116	140	4.5	55	4.9	3620	78	69	58
900	116	155	0.95	40	3.6	6840	100	100	85
1100	116	175	1.2	45	3.4	7280	100	92	78
1400	116	230	0.9	50	2.7	10630	100	100	100
2500	136	295	0.9	60	2.0	14470	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 1100V.DC									
180	76	95	2.3	45	5.6	1400	59	52	44
250	76	120	3.0	50	4.7	1430	56	50	42
300	76	140	3.5	55	4.6	1420	53	47	39
310	76	155	1.9	40	4.3	2770	70	65	55
360	76	175	2.0	45	4.0	2800	70	65	55
240	86	95	1.9	45	5.1	1870	68	60	51
330	86	120	2.4	50	4.7	1890	63	56	47
420	86	136	2.3	55	4.6	2080	65	58	49
420	86	155	1.7	40	4.4	3750	70	63	52
500	86	175	1.8	45	4.3	3730	70	67	57
750	86	265	1.3	55	3.0	5840	70	70	70
350	100	95	1.5	45	4.7	2640	70	65	53
450	100	120	1.8	50	4.1	2500	70	63	51
520	100	136	2.0	55	3.9	2500	70	62	50
550	100	140	2.1	55	3.8	2650	70	62	51
580	100	155	1.1	40	3.5	5020	70	70	70
650	100	175	1.2	45	3.2	4900	70	70	70
450	116	95	1.0	45	5.4	3500	80	80	68
620	116	120	1.4	50	5.0	3550	80	70	59
750	116	140	1.6	55	4.9	3550	75	66	56
780	116	158	0.9	40	3.6	6960	100	100	85
920	116	175	1.1	45	3.4	7150	100	96	81
1200	116	230	0.9	50	2.7	10710	100	100	100
2200	136	295	0.9	60	2.0	14960	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 1200V.DC									
140	76	95	2.7	45	5.6	1330	55	48	41
200	76	120	3.4	50	4.7	1400	53	47	40
240	76	140	3.9	55	4.6	1380	50	44	37
240	76	155	2.0	40	4.3	2630	70	64	54
280	76	175	2.1	45	4.2	2670	70	63	53
190	86	95	2.1	45	5.1	1810	65	57	48
260	86	120	2.7	50	4.7	1810	60	53	44
320	86	136	2.5	55	4.6	1930	63	55	47
330	86	140	3.0	55	4.6	1900	57	50	43
330	86	155	1.8	40	4.4	3610	70	66	56
380	86	175	1.9	45	4.3	3610	70	65	55
580	86	265	1.5	55	3.0	5520	70	70	70
250	100	95	1.7	45	4.7	2320	70	61	50
350	100	120	2.0	50	4.1	2390	70	61	50
400	100	136	2.2	55	3.9	2360	69	59	49
420	100	140	2.2	55	3.8	2370	69	59	49
450	100	155	1.2	40	3.5	4790	70	70	70
500	100	175	1.2	45	3.2	4640	70	70	70
360	116	95	1.1	45	5.4	3420	80	76	64
500	116	120	1.6	50	5.0	3490	75	66	55
600	116	140	1.8	55	4.9	3450	71	63	53
620	116	155	1.0	40	3.6	6780	100	98	83
720	116	175	1.2	45	3.4	6740	100	92	78
950	116	230	0.9	50	2.7	10210	100	100	100
1700	136	295	0.9	60	2.0	13920	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 1300V.DC									
120	76	95	2.9	45	5.6	1310	53	46	39
170	76	120	3.7	50	4.7	1360	51	45	38
210	76	140	4.1	55	4.6	1390	49	43	36
210	76	155	2.1	40	4.3	2640	70	62	53
240	76	175	2.3	45	4.2	2620	68	60	51
170	86	95	2.2	45	5.1	1850	63	56	47
230	86	120	2.8	50	4.7	1840	58	52	44
270	86	136	2.8	55	4.6	1860	59	52	44
270	86	140	3.3	55	4.6	1780	54	48	41
280	86	155	1.8	40	4.4	3510	70	66	56
320	86	175	1.9	45	4.3	3490	70	65	55
520	86	265	1.5	55	3.0	5670	70	70	67
210	100	95	1.8	45	4.7	2270	69	60	49
280	100	120	2.1	50	4.1	2230	67	58	48
330	100	136	2.3	55	3.9	2270	66	57	47
360	100	140	2.3	55	3.8	2370	67	58	47
380	100	155	1.2	40	3.5	4720	70	70	69
420	100	175	1.3	45	3.2	4540	70	70	70
320	116	95	1.2	45	5.4	3490	80	73	62
430	116	120	1.6	50	5.0	3440	75	66	55
520	116	140	1.8	55	4.9	3430	71	63	53
540	116	155	1	40	3.6	6770	100	98	83
630	116	175	1.2	45	3.4	6760	100	92	78
820	116	230	0.9	50	2.7	10100	100	100	100
1500	136	295	1.0	60	2.0	14080	100	100	100

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 1400V.DC									
100	76	95	3.1	45	5.6	1260	51	45	38
140	76	120	4.0	50	4.7	1290	49	43	36
170	76	140	4.6	55	4.6	1290	46	41	34
170	76	155	2.3	40	4.3	2460	67	59	50
200	76	175	2.4	45	4.2	2650	67	59	50
140	86	95	2.4	45	5.1	1760	61	53	45
190	86	120	3.1	50	4.7	1750	56	49	41
230	86	136	2.9	55	4.6	1800	58	51	43
240	86	155	1.9	40	4.4	3470	70	65	55
270	86	175	2.1	45	4.3	3400	70	62	53
420	86	265	1.5	55	3.0	5210	70	70	70
180	100	95	1.8	45	4.7	2240	68	59	48
250	100	120	2.2	50	4.1	2300	67	58	47
290	100	136	2.4	55	3.9	2300	65	57	46
320	100	155	1.2	40	3.5	4580	70	70	68
360	100	175	1.3	45	3.2	4490	70	70	69
260	116	95	1.3	45	5.4	3220	80	70	59
360	116	120	1.8	50	5.0	3280	70	62	52
450	116	140	2.0	55	4.9	3390	67	59	50
460	116	155	1.1	40	3.6	6540	100	94	79
540	116	175	1.3	45	3.4	6690	89	79	66
700	116	230	0.9	50	2.7	9950	100	94	79
1300	136	295	1.05	60	2.0	14080	100	100	97

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40℃	50℃	60℃
Un: 1500V.DC									
90	76	95	3.3	45	5.6	1220	49	44	37
120	76	120	4.4	50	4.7	1200	47	41	35
150	76	140	4.9	55	4.6	1230	45	39	33
150	76	155	2.4	40	4.3	2340	66	58	49
170	76	175	2.5	45	4.2	2310	65	58	49
120	86	95	2.6	45	5.1	1630	58	51	43
170	86	120	3.3	50	4.7	1690	54	48	40
200	86	136	3.0	55	4.6	1720	57	50	43
210	86	155	2.0	40	4.4	3280	70	63	53
240	86	175	2.1	45	4.3	3260	70	62	53
380	86	265	1.5	55	3.0	5080	70	70	70
160	100	95	1.9	45	4.7	2150	67	58	47
210	100	120	2.3	50	4.1	2080	65	56	46
250	100	136	2.5	55	3.9	2140	64	55	45
280	100	155	1.3	40	3.5	4320	70	70	67
320	100	175	1.3	45	3.2	4300	70	70	68
230	116	95	1.4	45	5.4	3120	77	68	57
320	116	120	1.9	50	5.0	3180	68	60	51
390	116	140	2.1	55	4.9	3200	66	58	49
420	116	155	1.1	40	3.6	6550	100	94	79
470	116	175	1.3	45	3.4	6280	89	79	66
600	116	230	1.0	50	2.7	9200	100	89	75
1100	136	295	1.1	60	2.0	12850	100	100	95

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 2000V.DC									
110	86	140	3.5	65	4.5	1830	48	42	35
180	86	230	1.8	60	3.2	3660	78	69	58
180	116	120	2.1	60	3.5	3660	70	61	52
220	116	140	2.3	65	3.3	3660	68	60	51
260	116	175	1.1	55	2.9	7360	100	93	79
360	116	230	1.3	60	2.4	7360	100	93	79
250	136	120	1.8	60	2.9	5090	78	67	55
310	136	140	2.0	65	2.7	5150	77	66	54
360	136	175	1.0	55	2.4	10200	100	99	81
500	136	230	1.2	60	2.1	10100	100	98	80
610	136	265	1.3	60	1.9	10100	100	98	80
Un: 2200V.DC									
90	86	140	3.7	65	4.5	1790	46	41	34
150	86	230	1.9	60	3.2	3670	77	68	57
140	116	120	2.2	60	3.6	3420	67	59	50
170	116	140	2.5	65	3.3	3390	66	58	49
210	116	175	1.1	55	2.9	7150	100	91	77
290	116	230	1.4	60	2.4	7100	100	91	77
200	136	120	1.9	60	2.9	4890	76	66	54
250	136	140	2.1	65	2.7	4990	75	65	53
290	136	175	1.0	55	2.4	9870	100	97	79
400	136	230	1.2	60	2.1	9790	100	96	79
500	136	265	1.4	60	1.9	9990	100	97	79

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 2400V.DC									
75	86	140	3.9	65	4.5	1770	45	40	33
120	86	230	2.0	60	3.2	3470	75	65	55
120	116	120	2.3	60	3.6	3470	66	58	49
140	116	140	2.6	65	3.3	3310	64	56	47
170	116	175	1.2	55	2.9	6840	100	89	75
240	116	230	1.4	60	2.5	6940	100	89	75
160	136	120	2.0	60	3.0	4630	73	63	52
200	136	140	2.2	65	2.8	4720	72	63	51
240	136	175	1.1	55	2.5	9660	100	95	78
330	136	230	1.3	60	2.1	9550	100	94	77
410	136	265	1.4	60	1.9	9690	100	95	77
Un: 2600V.DC									
63	86	140	4.1	65	4.5	1730	43	38	32
100	86	230	2.1	60	3.2	3370	72	63	53
100	116	120	2.4	60	3.6	3370	64	57	48
120	116	140	2.7	65	3.3	3310	63	55	47
140	116	175	1.2	55	2.9	6570	98	87	73
200	116	230	1.5	60	2.5	6750	99	87	73
140	136	120	2.0	60	3.0	4730	73	63	51
170	136	140	2.3	65	2.8	4690	71	62	50
200	136	175	1.1	55	2.5	9390	100	94	76
280	136	230	1.3	60	2.1	9590	100	93	76
340	136	265	1.5	60	1.9	9380	100	92	76

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 2800V.DC									
54	86	140	4.3	65	4.5	1710	42	37	32
88	86	230	2.2	60	3.2	3430	71	62	53
86	116	120	2.5	60	3.6	3350	63	56	47
100	116	140	2.9	65	3.4	3180	61	53	45
120	116	175	1.3	55	2.9	6500	97	85	72
170	116	230	1.5	60	2.5	6620	96	85	72
120	136	120	2.1	60	3.0	4680	71	62	51
140	136	140	2.4	65	2.8	4450	69	59	49
170	136	175	1.1	55	2.5	9210	100	92	75
240	136	230	1.3	60	2.1	9350	100	92	75
290	136	265	1.5	60	1.9	9230	100	91	74
Un: 3000V.DC									
46	86	140	4.6	65	4.6	1570	41	36	30
75	116	230	2.3	60	3.2	3150	69	61	51
74	116	120	2.6	60	3.6	3110	62	54	46
90	116	140	2.9	65	3.3	3090	60	53	45
100	116	175	1.3	55	3.0	5840	94	83	70
140	116	230	1.6	60	2.5	5880	93	82	69
100	136	120	2.2	60	3.0	4200	69	60	49
120	136	140	2.5	65	2.8	4120	67	58	47
140	136	175	1.2	55	2.5	8180	100	89	73
200	136	230	1.4	60	2.2	8400	100	89	73
250	136	265	1.6	60	1.9	8580	100	89	73

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 3200V.DC									
40	86	140	4.9	65	4.6	1470	40	35	30
65	86	230	2.4	60	3.2	2930	67	59	50
64	116	120	2.7	60	3.6	2880	60	53	45
78	116	140	3.1	65	3.4	2870	59	52	44
92	116	175	1.3	55	3.0	5760	94	83	70
120	116	230	1.7	60	2.5	5410	91	80	68
90	136	120	2.2	60	3.0	4050	69	59	49
110	136	140	2.5	65	2.8	4050	67	58	47
120	136	175	1.2	55	2.6	7520	100	87	71
180	136	230	1.4	60	2.2	8110	100	89	72
220	136	265	1.6	60	1.9	8100	100	88	72
Un: 3600V.DC									
28	86	140	4.0	65	4.6	1650	43	38	32
45	86	230	2.0	60	3.3	3290	72	64	54
44	116	120	2.3	60	3.7	3220	64	57	48
54	116	140	2.7	65	3.4	3190	63	55	47
88	116	230	1.4	60	2.5	6440	98	87	73
110	116	265	1.6	60	2.3	6510	97	85	72
61	136	120	2.0	60	3.0	4460	72	63	51
75	136	140	2.3	65	2.8	4440	71	61	50
120	136	230	1.3	60	2.2	8780	100	92	75
150	136	265	1.5	60	2.0	8880	100	92	75

Note: Special requirements can be designed according to customer requirements

TS09E

Standard size

Cap(uF)	Outline size (mm)		ESR @1kHz (mΩ)	Ls (nH)	Rth (K/W)	Î (A)	Imax (A)		
	ΦD	H					40°C	50°C	60°C
Un: 4000V.DC									
24	86	140	4.2	65	4.6	1650	42	37	32
38	86	230	2.1	60	3.3	3230	70	62	53
37	116	120	2.4	60	3.7	3140	63	55	47
46	116	140	2.8	65	3.4	3160	61	54	46
74	116	230	1.5	60	2.5	3290	96	85	72
92	116	265	1.7	60	2.33	6330	94	83	70
52	136	120	2.1	60	3.0	4420	71	62	50
64	136	140	2.3	65	2.8	4400	69	60	49
100	136	230	1.3	60	2.2	8500	100	90	73
130	136	265	1.5	60	2.0	8940	100	91	37

Note: Special requirements can be designed according to customer requirements

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.