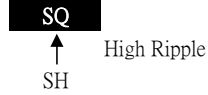


SQ

High Ripple Series

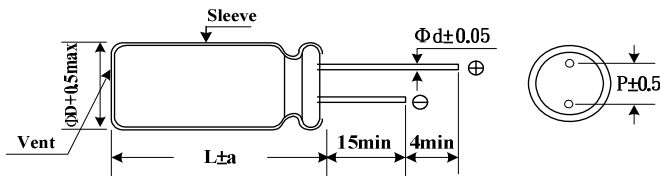
- Endurance: 105°C 2000 hours
- Recommended Applications : AV(TV, Video, Audio); Monitor/Computer; OA/HA/Communication; Converter/Inverter; Energy saving lamp; PFC circuit;SMPS; Ballast; Adapter
- Corresponding product to RoHS



SPECIFICATIONS

Item	Characteristics						
Category Temperature Range	-40~+105°C						
Rated Voltage Range	160 ~ 450VDC						
Rated Capacitance Range	2.2 ~ 220 µF						
Capacitance Tolerance	± 20 % (120Hz , 20°C)						
Leakage Current (20°C)	I=0.03CV +10 µ A (After rated voltage applied for 2 minutes) I : Max. leakage current (µ A), C : Nominal capacitance (µ F), V : Rated voltage (V)						
Dissipation Factor(MAX) (tan δ) (120Hz ,20°C)	WV	160	200	250	350	400	420~450
	tan δ	0.15	0.15	0.15	0.24	0.24	0.24
Low Temperature Stability Impedance Ratio (MAX)	Z (120Hz)	160	200	250	350	400	420~450
	Z(-25°C) / Z(20°C)	3	3	3	5	5	6
	Z(-40°C) / Z(20°C)	6	6	6	6	6	8
Endurance	After applying rated voltage with rated ripple current for2000 hours at 105°C , the capacitors shall meet the following requirements.						
	Capacitance change	Within ± 20% of initial value					
	D.F. (tan δ)	Not more than 200% of specified value					
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours,the capacitors shall meet the same requirement as Endurance.						

Dimensions [mm]



ΦD	8	10	12.5	13	16	18
P	3.5	5	5.0	5	7.5	7.5
Φd	0.6	0.6	0.6	0.6	0.8	0.8
a	1.5(2.0)	1.5(2.0)	2.0(2.5)	2.0	2.0	2.0

Notes : ():L≥30mm

Multiplier for Ripple Current

Freq. (Hz)		50	120	1K	10K	100K
Coefficient	< 33 µF	0.80	1.00	1.36	1.54	1.80
	≥ 33 µF	0.85	1.00	1.28	1.35	1.40

■ STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (120Hz)	Ripple current (mA/rms105°C) (100KHz)	Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (120Hz)	Ripple current (mA/rms105°C) (100KHz)	
160(200)	22	10x20	195	350	400(450)	39	8x52	320	448	
	33	13x20	315	450			10x40	320	448	
	47	13x25	420	600		47	10x45	355	500	
	68	13x25	420	600			12.5x40	365	510	
	100	16x25	665	950			16x25	350	490	
	220	18x36	980	1400			18x32	600	860	
200(250)	22	10x20	195	350		56	10x50	405	566	
	33	13x20	365	520			12.5x40	405	566	
	47	13x25	420	600			68	10x55	460	640
	68	16x25	665	950				12.5x45	460	640
	100	16x32	840	1200		16x30		510	714	
	250(300)	10	10x20	120		220	82	16x32	550	770
22		8x30	200	360		12.5x50		525	735	
		13x25	165	300		18x32		620	868	
27		8x35	215	380		120		18x32	750	1050
33		8x35	240	336	18x36		800	1120		
		13x25	280	400	420(470)	15	8x35	150	270	
39		8x40	260	360		22	8x40	195	350	
		10x30	275	500		27	8x45	220	396	
47		8x45	310	558			10x35	220	396	
		16x25	505	720		33	8x50	285	400	
56		10x40	350	490			10x40	285	400	
		68	10x40	400		560	39	10x42	310	430
16x32			570	810		12.5x35		320	448	
82		10x45	450	630		47	10x45	350	490	
		100	10x50	525			940	12.5x40	350	490
18x36	735		1050	56		10x52	390	545		
150	12.5x45	725	1015			12.5x42	390	545		
350(400)	2.2	10x16	30			50	68	12.5x45	450	630
	3.3	10x16	35			60	82	12.5x52	535	750
	4.7	10x20	45	78		2.2		10x16	60	110
	10	13x20	75	130	3.3	10x20		75	135	
	15	8x30	140	250	4.7	13x20		105	190	
		22	8x35	180	324	10	13x25	140	250	
	16x25		115	205	12	8x30	115	210		
	27	8x40	210	380	15	8x35	135	240		
		33	8x42	240	336	22	8x42	190	340	
	16x32		180	255	10x30		190	340		
	39	10x40	280	390	13x20		180	324		
		47	10x45	325	455		13x25	200	360	
	56		18x32	225	320	16x32	265	480		
		10x50	380	530	27	8x45	210	378		
	68	12.5x40	430	602		10x35	210	378		
82	12.5x45	500	700	33	8x52	290	406			
	100	12.5x50	630		880	10x42	290	406		
18x45		370	530		16x25	350	500			
400(450)	2.2	10x16	80		140	39	18x36	455	650	
	3.3	10x20	110	195	10x45		320	448		
	4.7	10x25	120	220	12.5x40		330	460		
	15	8x35	170	306	47	10x50	360	500		
		10	10x16	135		243	12.5x42	370	666	
	13x25		200	360	56	16x25	380	532		
		22	8x40	220		395	12.5x45	415	580	
	13x20		240	432	68	12.5*50	475	665		
	13x25		265	477		18x25	470	658		
	16x25		315	570	82	12.5x55	535	750		
	27	8x45	250	350		18x36	520	720		
		10x35	250	350	100	18x40	620	860		
	33		8x50	295		410	18x40	650	910	
		10x40	295	410		120	18x45	720	1000	
	16x32	490	700							