SZ Series

Feature

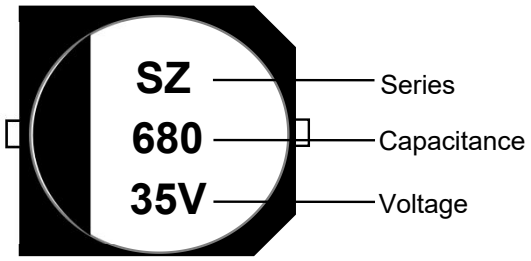
- ◆ High-temperature lead-free reflow soldering products
- ◆ Guaranteed duration: 2000~5000 hours at 105℃
- ◆ Surface packaging of high-density printed circuit boards
- ◆ RoHS compliant

Items	Characteristics									
Temperature Range	-55℃ ~ +105℃									
Rated Voltage Range	6.3V ~ 100V									
Capacitance Range	10 ~ 2200 μF									
Capacitance Tolerance	±20%（20℃，120Hz）									
Leakage Current	I≤0.01CV or 3μA， Take the larger of the two values (after applying the rated working voltage for 2 minutes) CR: nominal capacitance (μ F) UR: rated voltage (V)									
Dissipation Factor（tg δ）（20℃, 120Hz）	U_R (V)	6.3	10	16	25	35	50	63	80	100
	tg δ	0.26	0.19	0.16	0.14	0.12	0.10	0.10	0.10	0.08
	For capacitors with a capacitance greater than 1000μF, the dissipation factor increases by 0.02 for every additional 1000μF.									
Endurance	Under the condition of 105 ℃, after applying the rated voltage of 2000-5000H, the capacitor should meet the following requirements after recovering to 20 ℃ from 16V to 50V for 5000H.									
	Capacitance	within ±30% of the initial value								
	Dissipation Factor	≤200% of initial rated value								
	Leakage Current	≤ initial ralted value								
High Temperature Storage	After being stored for 1000 hours without voltage application in a 105℃ environment and then recovered to 20℃, the capacitor shall meet the above endurance requirements.									
Low Temperature	U_R (V)	6.3	10	16	25	35	50	63	80	100
	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2	2	2	2
	Z(-55℃)/Z(+20℃)	8	5	4	3	3	3	3	3	3
Resistance to soldering heat	The capacitor shall be maintained on a hot plate at 250°C for 30 seconds. After removal and recovery at room temperature, it shall meet the requirements listed on the right.				Capacitance Change			within ±10% of the initial value		
					Dissipation Factor（tg δ）			≤ initial ralted value		
					Leakage Current			≤ initial ralted value		

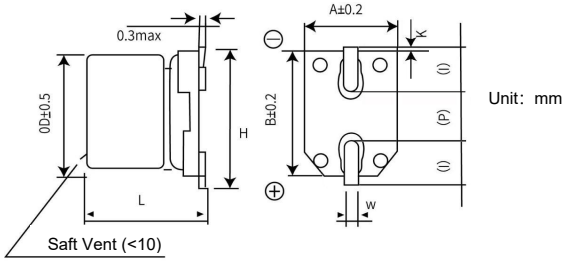
Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	50Hz	120Hz	1KHz	10K~100KHz
Coefficient（ 470）	0.65	0.85	0.95	1.00
Coefficient（560<C≦	0.70	0.90	0.95	1.00

Mark



Appearance & Dimension



ΦD	L	A, B	H	I	W	P	K
4	5.8±0.3	4.3	5.0	1.8	0.5~0.8	1.0	0.35+0.15/-0.20
5	5.8±0.3	5.3	5.9	2.1	0.5~0.8	1.3	
6.3	5.8±0.3	6.6	7.2	2.4	0.5~0.8	2.2	
6.3	7.7±0.3	6.6	7.2	2.4	0.5~0.8	2.2	
8	10.5±0.5	8.3	9.0	3.4	0.8~1.1	3.1	0.70±0.20
8	12.5±0.5	8.3	9.0	3.4	0.8~1.1	3.1	
10	10.5±0.5	10.3	11.1	3.5	0.7~ 1.3	4.5	
10	12.5±0.5	10.3	11.1	3.5	0.7~ 1.3	4.5	
12.5	13.5±0.5	13.5	13.9	4.7	1.1 ~1.4	4.4	
12.5	16.5±0.5	13.5	13.9	4.7	1.1 ~1.4	4.4	
16	16.5±0.5	17	17.8	5.5	1.1 ~1.4	6.4	
16	21.5±0.5	17	17.8	5.5	1.1 ~1.4	6.4	
18	16.5±0.5	19	19.7	6.7	1.1 ~1.4	6.4	
18	21.5±0.5	19	19.7	6.7	1.1 ~1.4	6.4	

SZ Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (μF)	Dimension (mm)		Electrical Characteristics			Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current 100KHz/105℃ (mA r.m.s)	tan δ (120HZ/20℃)	Impedance (100KHz) (20℃) (Ω)	
6.3	100	4	5.8	160	0.26	0.85	2000
	220	5	5.8	240	0.26	0.36	1000
	330	6.3	5.8	300	0.26	0.26	1000
	470	6.3	7.7	600	0.26	0.16	1000
	680	6.3	7.7	600	0.26	0.16	1000
	1500	8	10.5	850	0.26	0.08	500
	2200	10	10.5	1190	0.28	0.06	500
10	68	4	5.8	160	0.19	0.85	2000
	15	5	5.8	240	0.19	0.36	1000
	220	6.3	5.8	300	0.19	0.26	1000
	330	6.3	7.7	600	0.19	0.16	1000
	470	6.3	7.7	600	0.19	0.16	1000
	1000	8	10.5	850	0.19	0.08	500
	1500	10	10.5	1190	0.19	0.06	500
16	47	4	5.8	160	0.16	0.85	2000
	68	5	5.8	240	0.16	0.36	1000
	100	5	5.8	240	0.16	0.36	1000
	150	6.3	5.8	300	0.16	0.26	1000
	220	6.3	5.8	300	0.16	0.26	1000
	330	6.3	7.7	600	0.16	0.16	1000
	680	8	10.5	850	0.16	0.08	500
	820	8	10.5	850	0.16	0.08	500
	1000	10	10.5	1190	0.16	0.06	500
	1200	10	10.5	1190	0.16	0.06	500
25	22	4	5.8	160	0.14	0.85	2000
	33	4	5.8	160	0.14	0.85	2000
	47	5	5.8	240	0.14	0.36	1000
	68	5	5.8	240	0.14	0.36	1000
	100	6.3	5.8	300	0.14	0.26	1000
	150	6.3	7.7	600	0.14	0.16	1000
	220	6.3	7.7	600	0.14	0.16	1000
	470	8	10.5	850	0.14	0.08	500
	560	8	10.5	850	0.14	0.08	500
	820	10	10.5	1190	0.14	0.06	500
	1000	10	10.5	1190	0.14	0.06	500
35	22	4	5.8	160	0.12	0.85	2000
	33	5	5.8	240	0.12	0.36	1000
	47	5	5.8	240	0.12	0.36	1000
	68	6.3	5.8	300	0.12	0.26	1000
	100	6.3	5.8	300	0.12	0.26	1000
	150	6.3	7.7	600	0.12	0.16	1000
	330	8	10.5	850	0.12	0.08	500
	390	8	10.5	850	0.12	0.08	500
	560	10	10.5	1190	0.12	0.06	500
	680	10	10.5	1190	0.12	0.06	500

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Rated Voltage（V.DC)	Capacitance (±20%）(μF)	Dimension (mm)		Electrical Characteristics			Minimum Packaging Quantity（PCS）
		ΦD	L	Rated Ripple Current 100KHz/105℃ (mA r.m.s）	tan δ （120HZ/20℃)	Impedance （100KHz） （20℃) (Ω)	
50	10	4	5.8	85	0.10	2.30	2000
	10	5	5.8	165	0.10	0.88	1000
	22	5	5.8	165	0.10	0.88	1000
	47	6.3	5.8	195	0.10	0.68	1000
	100	6.3	7.7	350	0.10	0.34	1000
	220	8	10.5	670	0.10	0.18	500
	330	10	10.5	900	0.10	0.12	500
63	22	6.3	5.8	185	0.10	0.78	1000
	33	6.3	5.8	185	0.10	0.78	1000
	47	6.3	7.7	210	0.10	0.65	1000
	100	8	10.5	260	0.10	0.25	500
80	68	8	10.5	220	0.10	0.30	500
100	22	6.3	7.7	100	0.08	2.00	1000