ST Series

Feature

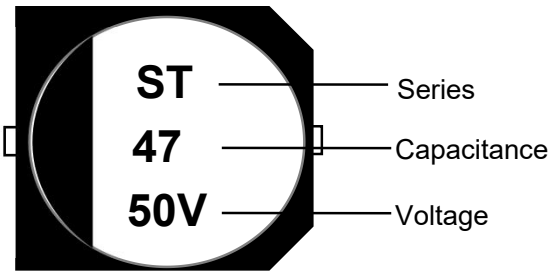
- ◆ High-temperature lead-free reflow soldering products
- ◆ Guaranteed duration: 3000~5000 hours at 105℃
- ◆ RoHS compliant

Items	Characteristics									
Temperature Range	-55℃ ~ +105℃									
Rated Voltage Range	6.3V ~ 100V									
Capacitance Range	22 ~ 1500 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	0.30	0.26	0.20	0.16	0.14	0.12	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°C, after being subjected to the rated operating voltage for 5000 hours (with ΦD=6.3x5.4 for a duration of 3000 hours) and subsequently returned to 20°C, the capacitors shall meet the following requirements.									
	Capacitance Change	within ±30% of the initial value								
	Dissipation Factor	≤300% 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℃)	3	3	2	2	2	2	2	2	2
	Z(-55℃)/Z(+20℃)	4	4	3	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		

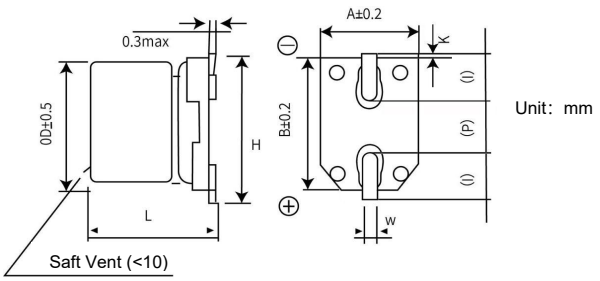
Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	50Hz	120Hz	1KHz	10K~100KHz
Coefficient （ 1000）	0.70	1.00	1.30	1.40
Coefficient（1000<C≦	0.85	1.00	1.13	1.15

Mark



Appearance & Dimension



ΦD	L	A, B	H	I	W	P	K
4	5.7±0.3	4.3	5.0	1.8	0.5~0.8	1.0	0.35 + 0.15 /- 0.20
5		5.3	5.9	2.1		1.3	
6.3		6.6	7.2	2.4		2.2	
	7.7±0.3						
8	10.5±0.5	8.3	9.0	3.4	0.8~1.1	3.1	0.70±0.20
	12.5±0.5						
10	10.5±0.5	10.3	11.1	3.5		4.5	
	12.5±0.5						
12.5	13.5±0.5	13.5	13.9	4.7	1.1~1.4	4.4	
	16.5±0.5						
16	16.5±0.5	17	17.8	5.5		6.4	
	21.5±0.5						
18	16.5±0.5	19	19.7	6.7			
	21.5±0.5						

ST Characteristics Table

Rated Voltage（V.DC）	Capacitance (±20%) (μF)	Dimension (mm)		Electrical Characteristics		Minimum Packaging Quantity（PCS）
		ΦD	L	Rated Ripple Current （120Hz/105℃） (mA r.m.s）	tan δ （120Hz/20℃）	
6.3	220	6.3	7.7	120	0.30	1000
	330	8	10.5	141	0.30	500
	470	10	10.5	320	0.30	500
	1000	10	10.5	410	0.30	500
10	220	8	10.5	141	0.26	500
	330	10	10.5	290	0.26	500
	470	10	10.5	320	0.26	500
	220	6.3	7.7	120	0.30	1000
	330	8	10.5	141	0.30	500
	470	10	10.5	320	0.26	500
16	47	6.3	5.4	55	0.20	1000
	100	6.3	5.4	70	0.20	1000
	100	6.3	7.7	81	0.20	1000
	220	8	10.5	141	0.20	500
	330	10	10.5	290	0.20	500
	470	8	10.5	141	0.20	500
	470	10	10.5	320	0.20	500
25	47	6.3	7.7	63	0.16	1000
	100	6.3	7.7	90	0.16	1000
	100	8	10.5	116	0.16	500
	220	10	10.5	290	0.16	500
	330	10	10.5	320	0.16	500
35	33	6.3	7.7	57	0.14	1000
	47	8	10.5	92	0.14	500
	100	10	10.5	151	0.14	500
	220	10	10.5	320	0.14	500
	330	12.5	13.5	320	0.14	200
	470	12.5	16.5	410	0.14	150
	1000	16	16.5	690	0.14	125
	1500	18	16.5	900	0.14	125
50	22	6.3	7.7	58	0.12	1000
	33	8	10.5	130	0.12	500
	47	6.3	7.7	70	0.12	1000
	47	8	10.5	141	0.12	500
	100	10	10.5	160	0.12	500
50	220	12.5	13.5	280	0.12	200
	330	12.5	16.5	360	0.12	150
	470	16	16.5	510	0.12	125
	1000	18	16.5	780	0.12	125
63	150	12.5	13.5	240	0.10	200
	220	12.5	16.5	320	0.10	150
	330	16	16.5	450	0.10	125
	470	16	16.5	540	0.10	125
80	100	12.5	13.5	220	0.10	200
	150	12.5	16.5	290	0.10	150
	220	16	16.5	410	0.10	125
	330	16	16.5	510	0.10	125
	470	18	16.5	650	0.10	125

ST Characteristics Table

Rated Voltage（V.DC)	Capacitance (±20%) (μF)	Dimension (mm)		Electrical Characteristics		Minimum Packaging Quantity（PCS）
		ΦD	L	Rated Ripple Current （120Hz/105℃) (mA r.m.s）	tan δ （120Hz/20℃)	
100	68	12.5	13.5	180	0.08	200
	100	12.5	16.5	240	0.08	150
	150	16	16.5	340	0.08	125
	220	16	16.5	410	0.08	125
	330	18	16.5	540	0.08	125