

Surface Mount Type

SP-Cap

Series: **SS, ST, LS, LT, CS, CT**



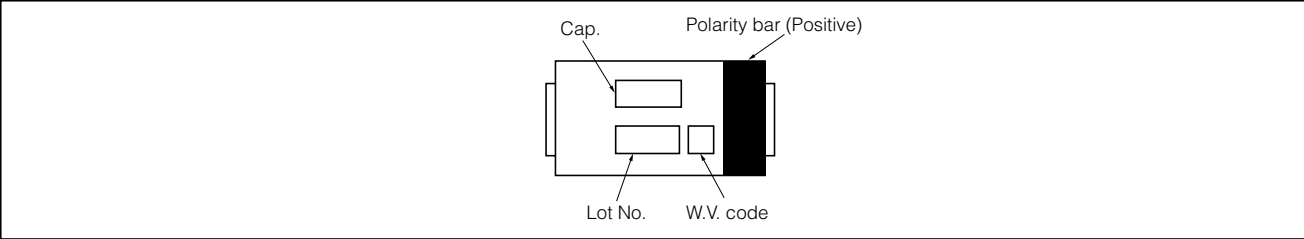
- Features

 - Low profile 1.1 mm, 1.4 mm
 - Low ESR(6 mΩ), Large capacitance (SS, ST, LS, LT series)
 - Low ESL by structure of SP-Cap 50% ESL of current products.
(LS, LT series)
 - High temperature reflow soldering applicable.
(Peak : 260 °C 10s, main heating : 230 °C 40s)
 - RoHS directive compliant

■ Specifications

Series & Size Code	SS	ST	LS	LT	CS	CT
Category Temp. Range	-40 °C to +105 °C					
Rated W.V.Range	2 V.DC to 2.5 V.DC				4 V.DC to 6.3 V.DC	
Nominal Cap.Range	180 µF to 220 µF	270 µF to 330 µF	180 µF to 220 µF	270 µF to 330 µF	68 µF to 120 µF	100 µF to 180 µF
Capacitance Tolerance	±20 % (120 Hz / + 20 °C)					
DC Leakage Current	I ≤ 0.1 CV (µA) 2minutes					
tan δ	≤ 0.06 (120 Hz/+20 °C)					
Surge Voltage	Rated Working Voltage × 1.25 (15 °C to 35 °C)					
Endurance	After applying rated working voltage for 1000 hours at 105 °C±2 °C, and then being stabilized at +20 °C, capacitor shall meet the following limits.					
	Capacitance change		±10% of initial measured value			
	tan δ		≤ Initial specified value			
	DC leakage current		≤ Initial specified value			
Moisture resistance	After storing for 500 hours at 60 °C, 90 %					
	Capacitance change of initial measurd value		2, 2.5 V.DC	4 V.DC	6.3 V.DC	
			+70, -20 %	+60, -20 %	+50, -20 %	
	tan δ		≤ 200 % of initial specified value			
DC leakage current		≤ Initial specified value				

■ Marking



■ Dimensions in mm(not to scale)

SS, ST, CS, CT series

Series & Size Code	L±0.2	W1±0.2	W2±0.1	H±0.1	P±0.3
SS, CS	7.3	4.3	2.4	1.1	1.3
ST, CT	7.3	4.3	2.4	1.4	1.3

* Externals of figure are the reference.

LS, LT series

Series & Size Code	L±0.2	W1±0.2	W2±0.1	H±0.1	P1±0.3	P2±0.1	P3±0.2	P4±0.2
LS	7.3	4.3	2.4	1.1	1.3	1.1	0.7	1.4
LT	7.3	4.3	2.4	1.4	1.3	1.1	0.7	1.4

* Externals of figure are the reference.

■ Standard Products

Series & Size Code	Rated W.V. (V.DC)	Capaci- tance (±20 %) (μF)	Case Size			Specification		Part number	The number of terminals		Min. Packaging Q'ty (pcs)
			L (mm)	W (mm)	H (mm)	*1 Ripple current (Ar.m.s.)	*2 ESR (mΩ max.)	Reflow condition : 260 °C *3	2	3	
SS	2	220	7.3	4.3	1.1	3.5	6	EEFSS0D221R	○		3500
	2.5	180	7.3	4.3	1.1	3.5	6	EEFSS0E181R	○		3500
ST	2	330	7.3	4.3	1.4	3.5	6	EEFST0D331R	○		3500
	2.5	270	7.3	4.3	1.4	3.5	6	EEFST0E271R	○		3500
LS	2	220	7.3	4.3	1.1	3.5	6	EEFLS0D221R		○	3500
	2.5	180	7.3	4.3	1.1	3.5	6	EEFLS0E181R		○	3500
LT	2	330	7.3	4.3	1.4	3.5	6	EEFLT0D331R		○	3500
	2.5	270	7.3	4.3	1.4	3.5	6	EEFLT0E271R		○	3500
CS	4	120	7.3	4.3	1.1	2.7	15	EEFCS0G121R	○		3500
	6.3	68	7.3	4.3	1.1	2.7	15	EEFCS0J680R	○		3500
CT	4	180	7.3	4.3	1.4	2.7	15	EEFCT0G181R	○		3500
	6.3	100	7.3	4.3	1.4	2.7	15	EEFCT0J101R	○		3500

*1: Ripple current (100 kHz/ +20 to +105 °C), *2: ESR (100 kHz/+20 °C)

*3: Please refer to the page of "Mounting Specifications".