Surface Mount Type **SP-Cap**

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



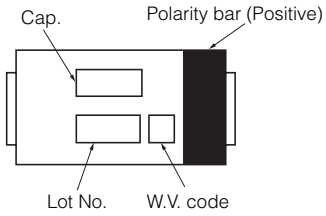
■ Features

- 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				

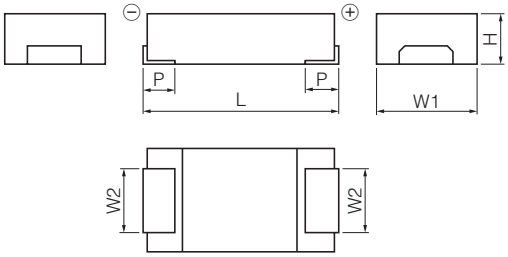
■ Marking



■ Dimensions in mm(not to scale)

(Unit : mm)

SS, ST, CS, CT series

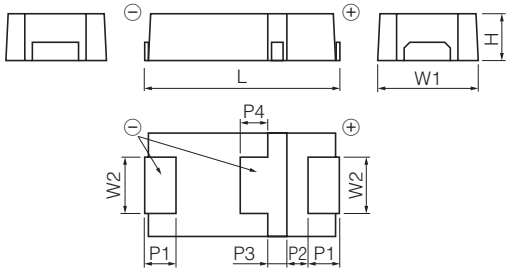


Series & Size Code	L±0.2	W1±0.2	W2±0.1	H±0.1	P±0.3
SS, CS	7.3	4.3	2.4	1.1	1.3
ST, CT	7.3	4.3	2.4	1.4	1.3

✻ Externals of figure are the reference.

(Unit : mm)

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.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

00 Nov. 2012

NEW

■ Standard Products

Series & Size Code	Rated W.V. (V.DC)	Capacitance (±20 %) (μF)	Case Size L (mm)	Case Size W (mm)	Case Size H (mm)	Specification ✻1 Ripple current (Ar.m.s.)	Specification ✻2 ESR (mΩ max.)	Part number ✻3 Reflow condition : 260 °C	The number of terminals 2	The number of terminals 3	Min. Packaging Q'ty (pcs)
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 "Mouting Specifications".

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