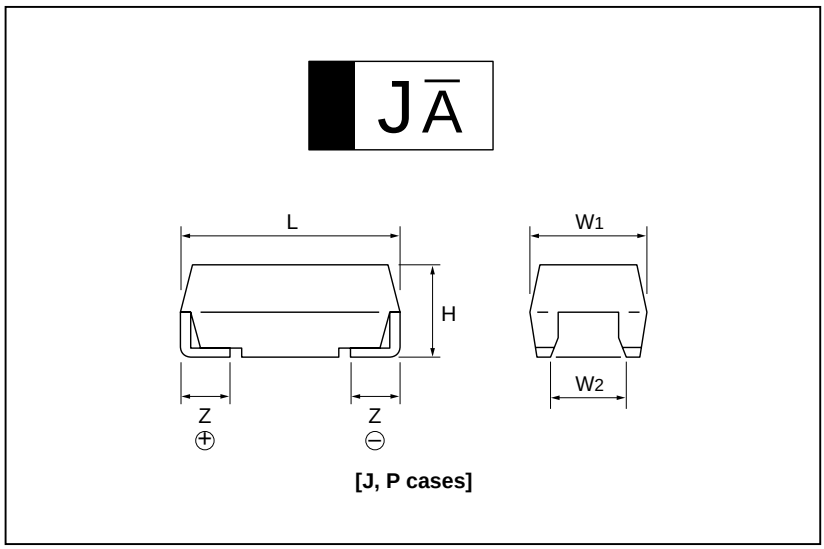
SV/S Series Tantalum Chip Capacitors
(Ultra-miniaturized)

DIMENSIONS [mm]



[J, P cases]

Case Code	EIA code	L	W_1	W_2	H	Z
J	1608	1.6 ± 0.1	0.8 ± 0.1	0.6 ± 0.1	0.8 ± 0.1	0.3 ± 0.15
P	2012	2.0 ± 0.2	1.25 ± 0.2	0.9 ± 0.2	1.1 ± 0.1	0.5 ± 0.1

C-V VALUE REFERENCE BY CASE CODE

DC Rated Voltage (Vdc) / μF	2.5	4	6.3	10	16
0.47					P
0.68				P	P
1			P	P	J, P
1.5		P	P	J, P	
2.2	P	P	J, P	J, P	
3.3	P	P	J, P	P	
4.7	P	J, P	J, P	P	
6.8	P	J, P	P		
10	J, P	J, P	P		
15	P	P			
22	P	P			
33	P				

PERFORMANCE CHARACTERISTICS

Operating temperature range
–55 to +125°C with proper voltage derating as shown in the following table.

DC working voltage and surge voltage

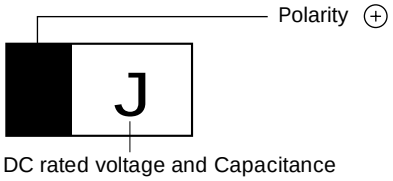
Rated voltage		2.5	4	6.3	10	16	V
Working	at 85°C	2.5	4	6.3	10	16	V
	at 125°C	1.6	2.5	4	6.3	10	V
Surge	at 85°C	3.3	5.2	8	13	20	V

Capacitance (at 20°C, 120 Hz)
Range: 0.47 μF to 33 μF
Tolerance: ±20%
Capacitance change with temperature
Not to exceed –20% at –55°C, +20% at 85°C, and +20% at 125°C
Tangent of loss angle (at 20°C, 120 Hz)
Refer to Standard Ratings
DC leakage current (at 20°C)
0.01 C•V[Note] μA or 0.5 μA, whichever is greater
Damp heat (90 to 95% RH at 40°C, 56 days (1344 h))
Capacitance change: ±20%
Tangent of loss angle: 150% of initial requirements
DC leakage current: initial requirements
Endurance (at 85°C, DC rated voltage, 2000 h)
Capacitance change: ±20%
Tangent of loss angle: initial requirements
DC leakage current: 200% of initial requirements
Resistance to soldering heat
Full immersion in solder, 260°C for 5 s.
Capacitance change: ±20%
Leakage current: initial requirements
Tangent of loss angle: initial requirements

See pages 25 and 26 for taping specifications.

Note: Product of capacitance in μF and voltage in V.

Markings
[J case]



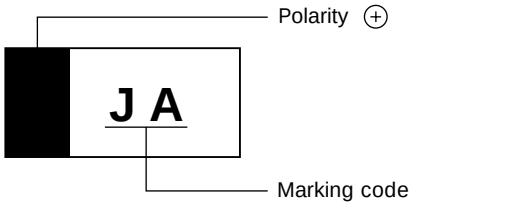
[J case Marking Code]

U_R / μF	2.5 V	4 V	6.3 V	10 V	16 V
1					C
1.5				A	
2.2			C	A	
3.3			C		
4.7		C	J		
6.8		G			
10	e				

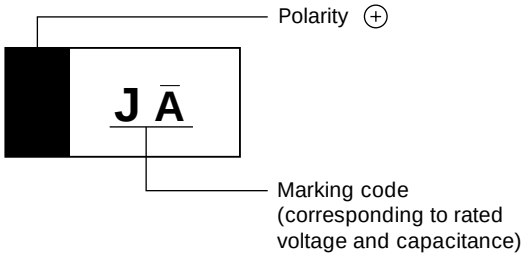
Markings

[P case]

up to 6.8 μF



over 10 μF

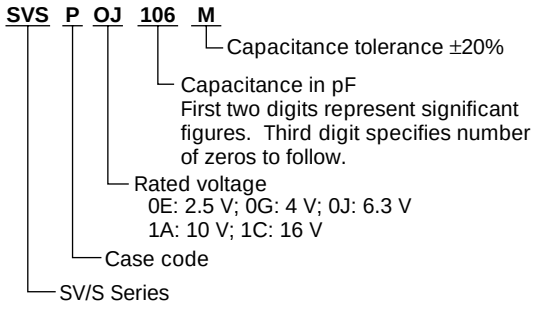


[P case Marking Code]

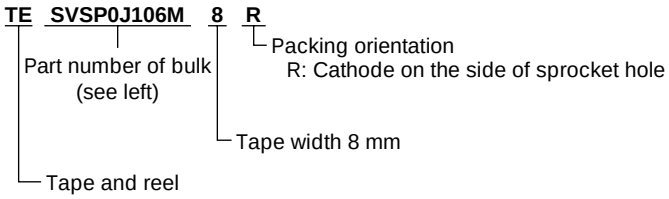
DC Rated Voltage (Vdc) / μF	2.5	4	6.3	10	16
0.47					CS
0.68				AW	CW
1			JA	AA	CA
1.5		GE	JE	AE	
2.2	eJ	GJ	JJ	AJ	
3.3	eN	GN	JN	AN	
4.7	eS	GS	JS	AS	
6.8	eW	GW	JW		
10	eĀ	GĀ	JĀ		
15	eĒ	GĒ			
22	eJ̄	GJ̄			
33	eN̄				

PART NUMBER SYSTEM

Bulk



Tape and Reel



STANDARD RATINGS

Part Number	Capacitance (μF)	Case Code	DC Leakage Current (μA)	Tangent of Loss Angle
16 V Rating				
SVSP1C474M	0.47	P	0.5	0.1
SVSP1C684M	0.68	P	0.5	0.1
SVSJ1C105M	1.0	J	0.5	0.1
SVSP1C105M	1.0	P	0.5	0.2
10 V Rating				
SVSP1A684M	0.68	P	0.5	0.1
SVSP1A105M	1	P	0.5	0.1
SVSJ1A155M	1.5	J	0.5	0.2
SVSP1A155M	1.5	P	0.5	0.2
SVSJ1A225M	2.2	J	0.5	0.2
SVSP1A225M	2.2	P	0.5	0.2
SVSP1A335M	3.3	P	0.5	0.2
SVSP1A475M	4.7	P	0.5	0.2
6.3 V Rating				
SVSP0J105M	1	P	0.5	0.1
SVSP0J155M	1.5	P	0.5	0.1
SVSJ0J225M	2.2	J	0.5	0.2
SVSP0J225M	2.2	P	0.5	0.2
SVSJ0J335M	3.3	J	0.5	0.2
SVSP0J335M	3.3	P	0.5	0.2
SVSJ0J475M	4.7	J	0.5	0.2
SVSP0J475M	4.7	P	0.5	0.2
SVSP0J685M	6.8	P	0.5	0.2
SVSP0J106M	10	P	0.6	0.2

Part Number	Capacitance (μF)	Case Code	DC Leakage Current (μA)	Tangent of Loss Angle
4 V Rating				
SVSP0G155M	1.5	P	0.5	0.1
SVSP0G225M	2.2	P	0.5	0.1
SVSP0G335M	3.3	P	0.5	0.2
SVSJ0G475M	4.7	J	0.5	0.2
SVSP0G475M	4.7	P	0.5	0.2
SVSJ0G685M	6.8	J	0.5	0.2
SVSP0G685M	6.8	P	0.5	0.2
SVSJ0G106M	10	J	0.5	0.2
SVSP0G106M	10	P	0.5	0.2
SVSP0G156M	15	P	0.5	0.2
SVSP0G226M	22	P	0.8	0.2
2.5 V Rating				
SVSP0E225M	2.2	P	0.5	0.1
SVSP0E335M	3.3	P	0.5	0.1
SVSP0E475M	4.7	P	0.5	0.2
SVSP0E685M	6.8	P	0.5	0.2
SVSJ0E106M	10	J	0.5	0.2
SVSP0E106M	10	P	0.5	0.2
SVSP0E156M	15	P	0.5	0.2
SVSP0E226M	22	P	0.5	0.2
SVSP0E336M	33	P	0.8	0.2