

SCN Series Solid Tantalum Chip Capacitors



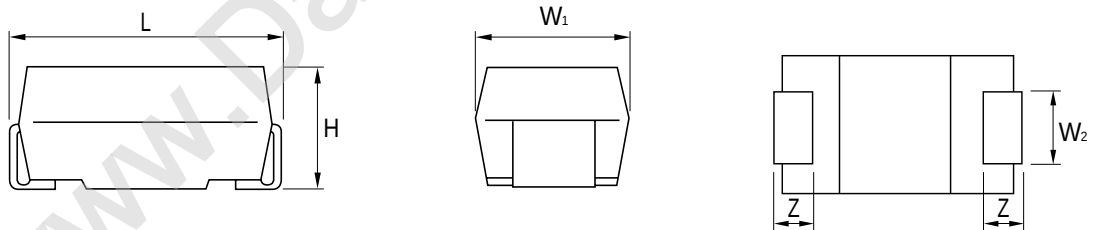
FEATURES

Molded Case available in four case codes.
Compatible with automatic pick and place equipment.
Meets or Exceeds EIA standard 53BAAC

PERFORMANCE / ELECTRICAL CHARACTERISTICS

- Operating Temperature: -55 °C to +85 °C (To +125 °C with voltage derating)
- Capacitance Range: 0.15 μ F to 68 μ F
- Capacitance Tolerance: $\pm 20\%$, $\pm 10\%$ standard
- Operating Voltage: 4WVDC to 35WVDC
- Compliant Terminations: 90/10 SnPb finish

Case Dimensions



Unit : mm(inch)

Case Code	L	W ₁	W ₂	H	Z
A	3.2 $\pm$ 0.2 (0.126 $\pm$ 0.008)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	1.2 $\pm$ 0.1 (0.047 $\pm$ 0.004)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	0.8 $\pm$ 0.3 (0.031 $\pm$ 0.012)
B	3.5 $\pm$ 0.2 (0.138 $\pm$ 0.008)	2.8 $\pm$ 0.2 (0.110 $\pm$ 0.008)	2.2 $\pm$ 0.1 (0.087 $\pm$ 0.004)	1.9 $\pm$ 0.2 (0.075 $\pm$ 0.008)	0.8 $\pm$ 0.3 (0.031 $\pm$ 0.012)
C	6.0 $\pm$ 0.3 (0.236 $\pm$ 0.012)	3.2 $\pm$ 0.3 (0.126 $\pm$ 0.012)	2.2 $\pm$ 0.1 (0.087 $\pm$ 0.004)	2.5 $\pm$ 0.3 (0.098 $\pm$ 0.012)	1.3 $\pm$ 0.3 (0.051 $\pm$ 0.012)
D	7.3 $\pm$ 0.3 (0.028 $\pm$ 0.012)	4.3 $\pm$ 0.3 (0.169 $\pm$ 0.012)	2.4 $\pm$ 0.1 (0.094 $\pm$ 0.004)	2.8 $\pm$ 0.3 (0.110 $\pm$ 0.012)	1.3 $\pm$ 0.3 (0.051 $\pm$ 0.012)

Case Size and Rating Voltage

	4(0G)	6.3(0J)	10(1A)	16(1C)	20(1D)	25(1E)	35(1V)
0.15(154)							A
0.22(224)							A
0.33(334)						A	A
0.47(474)				A	A	A	B
0.68(684)				A	A		
1.0(105)			A	A			B
1.5(155)		A	A			B	
2.2(225)	A	A			B	C	
3.3(335)	A			B	C	C	C
4.7(475)			B	C	C	C	D
6.8(685)		B	C	C	C	D	D
10(106)	B	C	C	C	D	D	
15(156)	C	C	C	D	D		
22(226)	C	C	D	D			
33(336)	C	D	D				
47(476)	D	D					
68(686)	D						

How to Order:

	TC	SCN	1A	225	M	B	A	R
Tantalum Capacitor								
Series								
Voltage								
Capacitance in Picofarads								
Capacitance Tolerance								
Case Size								
Reel								
Taping Direction								

SCN Ratings & Part Number Reference

Part No.	Case Size	Capacitance (μF)	DCL(μA) Max.	DF(%) Max.
4 volt @ 85°C (2.5 volt @ 125°C)				
TCSCN0G225*AAR	A	2.2	0.5	6
TCSCN0G335*AAR	A	3.3	0.5	6
TCSCN0G106*BAR	B	10.0	0.5	6
TCSCN0G156*CAR	C	15.0	0.6	6
TCSCN0G226*CAR	C	22.0	0.9	6
TCSCN0G336*CAR	C	33.0	1.3	6
TCSCN0G476*DAR	D	47.0	1.9	6
TCSCN0G686*DAR	D	68.0	2.7	6
6.3 volt @ 85°C (4 volt @ 125°C)				
TCSCN0J155*AAR	A	1.5	0.5	6
TCSCN0J225*AAR	A	2.2	0.5	6
TCSCN0J685*BAR	B	6.8	0.5	6
TCSCN0J106*CAR	C	10.0	0.6	6
TCSCN0J156*CAR	C	15.0	0.9	6
TCSCN0J226*CAR	C	22.0	1.4	6
TCSCN0J336*DAR	D	33.0	2.0	6
TCSCN0J476*DAR	D	47.0	3.0	6
10 volt @ 85°C (6.3 volt @ 125°C)				
TCSCN1A105*AAR	A	1.0	0.5	4
TCSCN1A155*AAR	A	1.5	0.5	6
TCSCN1A475*BAR	B	4.7	0.5	6
TCSCN1A685*CAR	C	6.8	0.7	6
TCSCN1A106*CAR	C	10.0	1.0	6
TCSCN1A156*CAR	C	15.0	1.5	6
TCSCN1A226*DAR	D	22.0	2.2	6
TCSCN1A336*DAR	D	33.0	3.3	6
16 volt @ 85°C (10 volt @ 125°C)				
TCSCN1C684*AAR	A	0.68	0.5	4
TCSCN1C105*AAR	A	1.0	0.5	4
TCSCN1C335*BAR	B	3.3	0.5	6
TCSCN1C475*CAR	C	4.7	0.7	6
TCSCN1C685*CAR	C	6.8	1.0	6
TCSCN1C106*CAR	C	10.0	1.6	6
TCSCN1C156*DAR	D	15.0	2.2	6
TCSCN1C226*DAR	D	22.0	3.5	6
20 volt @ 85°C (13 volt @ 125°C)				
TCSCN1D474*AAR	A	0.47	0.5	4
TCSCN1D684*AAR	A	0.68	0.5	4
TCSCN1D225*BAR	B	2.2	0.5	6
TCSCN1D335*CAR	C	3.3	0.6	6
TCSCN1D475*CAR	C	4.7	0.9	6
TCSCN1D685*CAR	C	6.8	1.4	6
TCSCN1D106*DAR	D	10.0	2.0	6
TCSCN1D156*DAR	D	15.0	3.0	6
25 volt @ 85°C (16 volt @ 125°C)				
TCSCN1E334*AAR	A	0.33	0.5	4
TCSCN1E474*AAR	A	0.47	0.5	4
TCSCN1E155*BAR	B	1.5	0.5	6
TCSCN1E335*CAR	C	3.3	0.8	6
TCSCN1E475*CAR	C	4.7	1.1	6
TCSCN1E685*DAR	D	6.8	1.7	6
TCSCN1E106*DAR	D	10.0	2.5	6
35 volt @ 85°C (22 volt @ 125°C)				
TCSCN1V154*AAR	A	0.15	0.5	4
TCSCN1V224*AAR	A	0.22	0.5	4
TCSCN1V334*AAR	A	0.33	0.5	4
TCSCN1V474*BAR	B	0.47	0.5	4
TCSCN1V105*BAR	B	1.0	0.5	4
TCSCN1V225*CAR	C	2.2	0.7	6
TCSCN1V335*CAR	C	3.3	1.2	6
TCSCN1V475*DAR	D	4.7	1.6	6
TCSCN1V685*DAR	D	6.8	2.3	6

* Insert K for ±10% tolerance and M for ±20%.

SCS Series Solid Tantalum Chip Capacitors



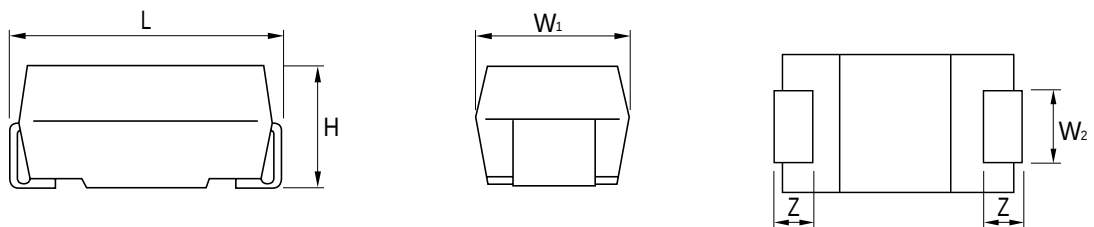
FEATURES

Molded Case available in five case codes.
Extended Range Values.
Compatible with automatic pick and place equipment.
Meets or Exceeds EIA standard 53BAAC
New Low Profile Case Size

PERFORMANCE / ELECTRICAL CHARACTERISTICS

- Operating Temperature: -55°C to +85°C (To +125°C with voltage derating)
- Capacitance Range: 0.47μF to 220μF
- Capacitance Tolerance: ±20%, ±10% standard
- Operating Voltage: 4WVDC to 35WVDC
- Compliant Terminations: 90/10 SnPb finish

Case Dimensions



Unit : mm(inch)

Case Code	L	W ₁	W ₂	H	Z
P	2.0±0.2 (0.079±0.008)	1.25±0.2 (0.049±0.008)	0.9±0.1 (0.035±0.004)	1.2 max (0.047 max)	0.5±0.2 (0.020±0.008)
A	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.2±0.1 (0.047±0.004)	1.6±0.2 (0.063±0.008)	0.8±0.3 (0.031±0.012)
B	3.5±0.2 (0.138±0.008)	2.8±0.2 (0.110±0.008)	2.2±0.1 (0.087±0.004)	1.9±0.2 (0.075±0.008)	0.8±0.3 (0.031±0.012)
C	6.0±0.3 (0.236±0.012)	3.2±0.3 (0.126±0.012)	2.2±0.1 (0.087±0.004)	2.5±0.3 (0.098±0.012)	1.3±0.3 (0.051±0.012)
D	7.3±0.3 (0.028±0.012)	4.3±0.3 (0.169±0.012)	2.4±0.1 (0.094±0.004)	2.8±0.3 (0.110±0.012)	1.3±0.3 (0.051±0.012)

Case Size and Rating Voltage

	4(0G)	6.3(0J)	10(1A)	16(1C)	20(1D)	25(1E)	35(1V)
0.47(474)							A
0.68(684)						A	A
1.0(105)			P	P	A	A	A
1.5(155)				A	A	A	A, B*
2.2(225)			A	A	A	A, B	B
3.3(335)		P, A	A	A	A, B	B	
4.7(475)	A	P, A	A	A, B	B	B	C
6.8(685)	A	A	A, B	B	B	B, C	C
10(106)	A	P, A, B	A, B	B	B, C	C	D
15(156)	A, B	B	B	B, C	C	D	D
22(226)	A, B	B	B, C	B, C	D	D	
33(336)	B	B, C	B, C	C, D	D		
47(476)	B, C	B, C	C, D	D			
68(686)	C	D	D				
100(107)	D	C, D	D				
150(157)							
220(227)		D					

■ Standard Range
 ■ Extended Range
 ■ Development Range

* Contact factory for availability

How to Order:

	TC	SCS	0J	106	M	A	A	R
Tantalum Capacitor								
Series								
Voltage								
Capacitance in Picofarads								
Capacitance Tolerance								
	K=±10%, M=±20%							
Case Size								
	P, A, B, C, D							
Reel								
	A=7 inches, C=13 inches							
Taping Direction								

SCS Ratings & Part Number Reference

Part No.	Case Size	Capacitance (μF)	DCL(μA) Max.	DF(%) Max.
4 volt @ 85°C (2.5 volt @ 125°C)				
TCSCS0G475*AAR	A	4.7	0.5	8
TCSCS0G685*AAR	A	6.8	0.5	8
TCSCS0G106*AAR	A	10.0	0.5	8
TCSCS0G156*AAR	A	15.0	0.6	8
TCSCS0G156*BAR	B	15.0	0.6	8
TCSCS0G226*BAR	B	22.0	0.9	8
TCSCS0G336*BAR	B	33.0	1.3	8
TCSCS0G476*CAR	C	47.0	1.9	8
TCSCS0G686*CAR	C	68.0	2.7	8
TCSCS0G107*DAR	D	100.0	4.0	8
6.3 volt @ 85°C (4 volt @ 125°C)				
TCSCS0J335*AAR	A	3.3	0.5	8
TCSCS0J475*AAR	A	4.7	0.5	8
TCSCS0J685*AAR	A	6.8	0.5	8
TCSCS0J106*AAR	A	10.0	0.6	8
TCSCS0J106*BAR	B	10.0	0.6	8
TCSCS0J156*BAR	B	15.0	0.8	8
TCSCS0J226*BAR	B	22.0	1.3	8
TCSCS0J336*BAR	B	33.0	2.0	8
TCSCS0J476*BAR	B	47.0	3.0	8
TCSCS0J336*CAR	C	33.0	2.0	8
TCSCS0J476*CAR	C	47.0	3.0	8
TCSCS0J686*DAR	D	68.0	4.3	8
TCSCS0J107*DAR	D	100.0	6.3	8
10 volt @ 85°C (6.3 volt @ 125°C)				
TCSCS1A225*AAR	A	2.2	0.5	8
TCSCS1A335*AAR	A	3.3	0.5	8
TCSCS1A475*AAR	A	4.7	0.5	8
TCSCS1A685*AAR	A	6.8	0.7	8
TCSCS1A685*BAR	B	6.8	0.7	8
TCSCS1A106*AAR	A	10.0	1.0	8
TCSCS1A106*BAR	B	10.0	1.0	8
TCSCS1A156*BAR	B	15.0	1.5	8
TCSCS1A226*BAR	B	22.0	2.2	8
TCSCS1A226*CAR	C	22.0	2.2	8
TCSCS1A336*CAR	C	33.0	3.3	8
TCSCS1A476*CAR	C	47.0	4.7	8
TCSCS1A476*DAR	D	47.0	4.7	8
TCSCS1A686*DAR	D	68.0	6.8	8
TCSCS1A107*DAR	D	100.0	10.0	8
16 volt @ 85°C (10 volt @ 125°C)				
TCSCS1C155*AAR	A	1.5	0.5	8
TCSCS1C225*AAR	A	2.2	0.5	8
TCSCS1C335*AAR	A	3.3	0.5	8
TCSCS1C475*AAR	A	4.7	0.7	8
TCSCS1C475*BAR	B	4.7	0.7	8
TCSCS1C685*AAR	A	6.8	1.0	8
TCSCS1C685*BAR	B	6.8	1.0	8
TCSCS1C106*BAR	B	10.0	1.6	8
TCSCS1C156*CAR	C	15.0	2.4	8
TCSCS1C226*CAR	C	22.0	3.5	8
TCSCS1C336*DAR	D	33.0	5.3	8
TCSCS1C476*CAR	C	47.0	7.5	8
TCSCS1C476*DAR	D	47.0	7.5	8
20 volt @ 85°C (13 volt @ 125°C)				
TCSCS1D105*AAR	A	1.0	0.5	6
TCSCS1D155*AAR	A	1.5	0.5	8
TCSCS1D225*AAR	A	2.2	0.5	8
TCSCS1D335*AAR	A	3.3	0.7	8
TCSCS1D335*BAR	B	3.3	0.7	8
TCSCS1D475*BAR	B	4.7	1.0	8
TCSCS1D685*BAR	B	6.8	1.4	8
TCSCS1D106*CAR	C	10.0	2.0	8
TCSCS1D156*CAR	C	15.0	3.0	8
TCSCS1D226*DAR	D	22.0	4.4	8
TCSCS1D336*DAR	D	33.0	6.6	8

* Insert K for ±10% tolerance and M for ±20%.

Part No.	Case Size	Capacitance (μF)	DCL(μF) Max.	DF(%) Max.
25 volt @ 85℃(16 volt @ 125℃)				
TCSCS1E684*AAR	A	0.68	0.5	6
TCSCS1E105*AAR	A	1.0	0.5	6
TCSCS1E155*AAR	A	1.5	0.5	8
TCSCS1E225*AAR	A	2.2	0.6	8
TCSCS1E225*BAR	B	2.2	0.6	8
TCSCS1E335*BAR	B	3.3	0.8	8
TCSCS1E475*BAR	B	4.7	1.2	8
TCSCS1E685*CAR	C	6.8	1.7	8
TCSCS1E106*CAR	C	10.0	2.5	8
TCSCS1E156*DAR	D	15.0	3.7	8
TCSCS1E226*DAR	D	22.0	5.5	8
35 volt @ 85℃(22 volt @ 125℃)				
TCSCS1V474*AAR	A	0.47	0.5	6
TCSCS1V684*AAR	A	0.68	0.5	6
TCSCS1V105*AAR	A	1.0	0.5	6
TCSCS1V155*AAR	A	1.5	0.5	8
TCSCS1V155*BAR	B	1.5	0.5	8
TCSCS1V225*BAR	B	2.2	0.7	8
TCSCS1V335*BAR	B	3.3	1.1	8
TCSCS1V475*CAR	C	4.7	1.6	8
TCSCS1V685*CAR	C	6.8	2.3	8
TCSCS1V106*DAR	D	10.0	3.5	8
TCSCS1V156*DAR	D	15.0	5.2	8

* Insert K for ±10% tolerance and M for ±20%.

SCE Series Low ESR



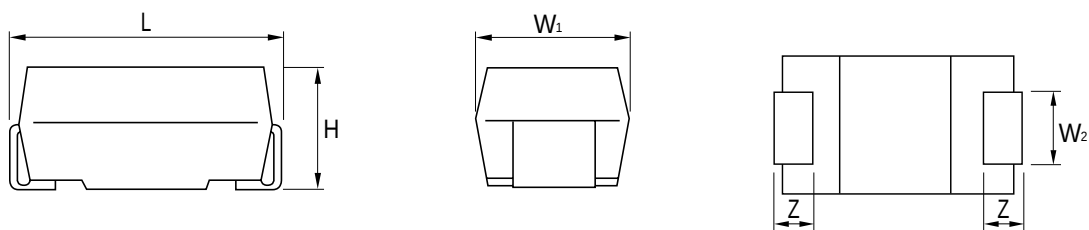
FEATURES

Designed for very low ESR
Molded Case available in four case codes.
Extended Range Values.
Compatible with automatic pick and place equipment.
Meets or Exceeds EIA Standard 53BAAC

PERFORMANCE / ELECTRICAL CHARACTERISTICS

- Operating Temperature: -55°C to +85°C (To +125°C with voltage derating)
- Capacitance Range: 0.47μF to 220μF
- Capacitance Tolerance: ±20%, ±10% standard
- Operating Voltage: 4WVDC to 35WVDC
- Compliant Terminations: 90/10 SnPb finish

Case Dimensions



Unit : mm(inch)

Case Code	L	W ₁	W ₂	H	Z
A	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.2±0.1 (0.047±0.004)	1.6±0.2 (0.063±0.008)	0.8±0.3 (0.031±0.012)
B	3.5±0.2 (0.138±0.008)	2.8±0.2 (0.110±0.008)	2.2±0.1 (0.087±0.004)	1.9±0.2 (0.075±0.008)	0.8±0.3 (0.031±0.012)
C	6.0±0.3 (0.236±0.012)	3.2±0.3 (0.126±0.012)	2.2±0.1 (0.087±0.004)	2.5±0.3 (0.098±0.012)	1.3±0.3 (0.051±0.012)
D	7.3±0.3 (0.288±0.012)	4.3±0.3 (0.169±0.012)	2.4±0.1 (0.094±0.004)	2.8±0.3 (0.110±0.012)	1.3±0.3 (0.051±0.012)

Case Size and Rating Voltage

	4(0G)	6.3(0J)	10(1A)	16(1C)	20(1D)	25(1E)	35(1V)
0.47(474)						A	
0.68(684)					A	A	
1.0(105)				A	A	A	
1.5(155)				A	A		
2.2(225)		A	A	A	A		B C
3.3(335)		A	A	A B		B	C
4.7(475)		A	A B	A B	B C		C D
6.8(685)	A	A B	A B	B C	B C		D
10(106)	A	A B	A B C	B C	C	C D	D
15(156)	A	B	B C		C D	D	
22(226)	B	B C	C	C D	D	D	
33(336)	C		D	D	D		
47(476)		C D	D	D			
68(686)		D	D				
100(107)		D	D				
150(157)							
220(227)		D					

How to Order:

	TC	SCE	1A	107	M	A	A	R
Tantalum Capacitor	_____	_____	_____	_____	_____	_____	_____	_____
Series	_____	_____	_____	_____	_____	_____	_____	_____
Voltage	_____	_____	_____	_____	_____	_____	_____	_____
Capacitance in Picofarads	_____	_____	_____	_____	_____	_____	_____	_____
Capacitance Tolerance	_____	_____	_____	_____	_____	_____	_____	_____
	K=±10%, M=±20%							
Case Size	_____	_____	_____	_____	_____	_____	_____	_____
	A, B, C, D							
Reel	_____	_____	_____	_____	_____	_____	_____	_____
	A=7 inches, C=13 inches							
Taping Direction	_____	_____	_____	_____	_____	_____	_____	_____

SCE Ratings & Part Number Reference

Part No.	Case Size	Capacitance (μF)	DCL(μA) Max.	DF(%) 120Hz Max.	ESR(Ω) 100KHz Max.
4 volt @ 85°C(2.5 volt @ 125°C)					
TCSCE0G685*AAR	A	6.8	0.5	8	3.0
TCSCE0G106*AAR	A	10.0	0.5	8	2.0
TCSCE0G156*AAR	A	15.0	0.6	8	1.5
TCSCE0G226*BAR	B	22.0	0.9	8	0.6
TCSCE0G336*CAR	C	33.0	1.3	8	0.5
6.3 volt @ 85°C(4 volt @ 125°C)					
TCSCE0J225*AAR	A	2.2	0.5	8	6.0
TCSCE0J335*AAR	A	3.3	0.5	8	6.0
TCSCE0J475*AAR	A	4.7	0.5	8	3.5
TCSCE0J685*AAR	A	6.8	0.5	8	2.0
TCSCE0J685*BAR	B	6.8	0.5	8	1.2
TCSCE0J106*AAR	A	10.0	0.6	8	2.0
TCSCE0J106*BAR	B	10.0	0.6	8	1.5
TCSCE0J156*BAR	B	15.0	0.8	8	1.0
TCSCE0J226*BAR	B	22.0	1.3	8	0.8
TCSCE0J226*CAR	C	22.0	1.3	8	0.5
TCSCE0J476*CAR	C	47.0	3.0	8	0.4
TCSCE0J476*DAR	D	47.0	3.0	8	0.22
TCSCE0J686*DAR	D	68.0	4.3	8	0.2
TCSCE0J107*DAR	D	100.0	6.3	8	0.2
TCSCE0J227*DAR	D	220.0	13.9	8	0.15
10 volt @ 85°C(6.3 volt @ 125°C)					
TCSCE1A225*AAR	A	2.2	0.5	8	6.0
TCSCE1A335*AAR	A	3.3	0.5	8	4.0
TCSCE1A475*AAR	A	4.7	0.5	8	3.0
TCSCE1A475*BAR	B	4.7	0.7	8	1.5
TCSCE1A685*AAR	A	6.8	0.7	8	3.0
TCSCE1A685*BAR	B	6.8	0.7	8	1.2
TCSCE1A106*AAR	A	10.0	1.0	8	2.0
TCSCE1A106*BAR	B	10.0	1.0	8	1.0
TCSCE1A106*CAR	C	10.0	1.0	8	0.8
TCSCE1A156*BAR	B	15.0	1.5	8	0.7
TCSCE1A156*CAR	C	15.0	1.5	8	0.5
TCSCE1A226*CAR	C	22.0	2.2	8	0.4
TCSCE1A336*DAR	D	33.0	3.3	8	0.25
TCSCE1A476*DAR	D	47.0	4.7	8	0.22
TCSCE1A686*DAR	D	68.0	6.8	8	0.2
TCSCE1A107*DAR	D	100.0	10.0	8	0.15
16 volt @ 85°C(10 volt @ 125°C)					
TCSCE1C105*AAR	A	1.0	0.5	4	6.0
TCSCE1C155*AAR	A	1.5	0.5	8	6.0
TCSCE1C225*AAR	A	2.2	0.5	8	4.0
TCSCE1C335*AAR	A	3.3	0.5	8	4.0
TCSCE1C335*BAR	B	3.3	0.5	8	2.0
TCSCE1C475*AAR	A	4.7	0.7	8	3.0
TCSCE1C475*BAR	B	4.7	0.7	8	1.5
TCSCE1C685*BAR	B	6.8	1.0	8	1.2
TCSCE1C685*CAR	C	6.8	1.0	8	0.8
TCSCE1C106*BAR	B	10.0	1.6	8	1.0
TCSCE1C106*CAR	C	10.0	1.6	8	0.6
TCSCE1C226*CAR	C	22.0	3.5	8	0.4
TCSCE1C226*DAR	D	22.0	3.5	8	0.3
TCSCE1C336*DAR	D	33.0	5.3	8	0.3
TCSCE1C476*DAR	D	47.0	7.5	8	0.2
20 volt @ 85°C(13 volt @ 125°C)					
TCSCE1D684*AAR	A	0.68	0.5	4	8.0
TCSCE1D105*AAR	A	1.0	0.5	8	5.5
TCSCE1D155*AAR	A	1.5	0.5	8	4.5
TCSCE1D225*AAR	A	2.2	0.5	8	4.0
TCSCE1D475*BAR	B	4.7	1.0	8	1.5
TCSCE1D475*CAR	C	4.7	1.0	8	0.6
TCSCE1D685*BAR	B	6.8	1.4	8	1.5
TCSCE1D685*CAR	C	6.8	1.4	8	0.6
TCSCE1D106*CAR	C	10.0	2.0	8	0.5
TCSCE1D156*CAR	C	15.0	3.0	8	0.4
TCSCE1D156*DAR	D	15.0	3.0	8	0.4
TCSCE1D226*DAR	D	22.0	4.4	8	0.3
TCSCE1D336*DAR	D	33.0	6.6	8	0.3

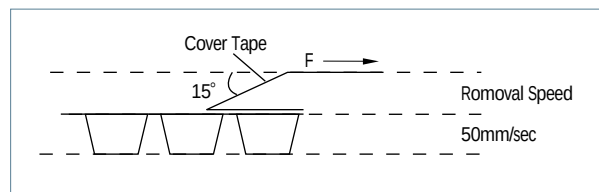
Part No.	Case Size	Capacitance (μF)	DCL(μA) Max.	DF(%) 120Hz Max.	ESR(Ω) 100KHz Max.
25 volt @ 85℃(16 volt @ 125℃)					
TCSCS1E474*AAR	A	0.47	0.5	4	9.0
TCSCS1E684*AAR	A	0.68	0.5	6	6.0
TCSCS1E105*AAR	A	1.0	0.5	8	4.0
TCSCS1E335*AAR	B	3.3	0.8	8	2.0
TCSCS1E475*BAR	C	4.7	1.2	8	0.6
TCSCS1E106*BAR	C	10.0	2.5	8	0.6
TCSCS1E106*BAR	D	10.0	2.5	8	0.4
TCSCS1E156*CAR	D	15.0	3.7	8	0.4
TCSCS1E226*CAR	D	22.0	5.5	8	0.3
35 volt @ 85℃(22 volt @ 125℃)					
TCSCS1V225*BAR	B	2.2	0.7	8	2.5
TCSCS1V335*CAR	C	3.3	1.1	8	0.8
TCSCS1V475*CAR	C	4.7	1.6	8	1.0
TCSCS1V475*DAR	D	4.7	1.6	8	1.0
TCSCS1V685*DAR	D	6.8	2.3	8	0.5
TCSCS1V106*DAR	D	10.0	3.5	8	0.4

* Insert K for ±10% tolerance and M for ±20%.

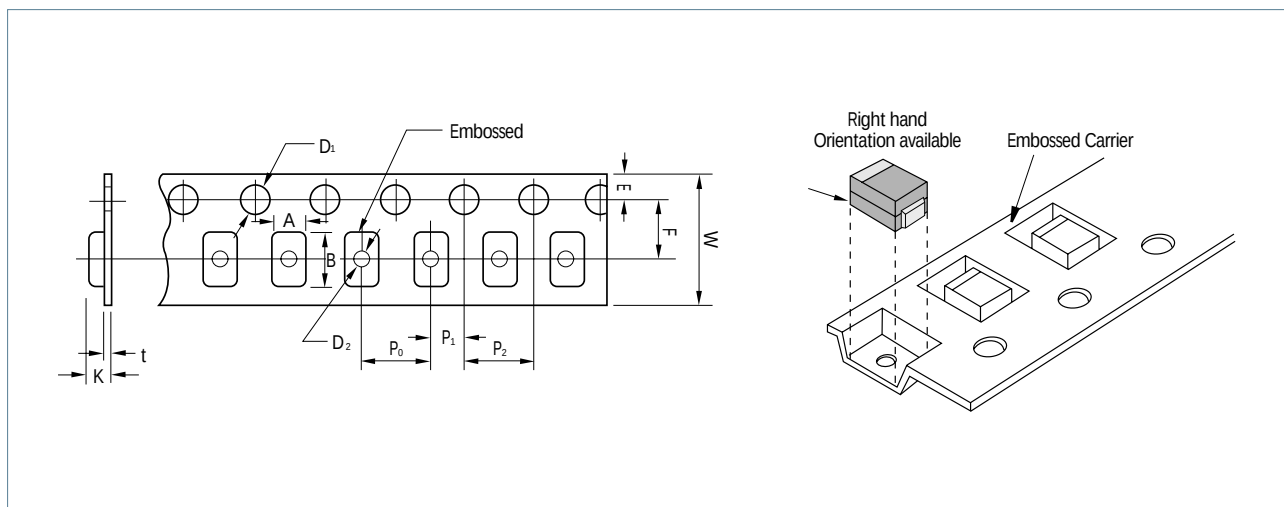
PACKAGING INFORMATION

SAMSUNG's Molded Tantalum Chip Capacitors are packaged in 8mm and 12mm plastic tape on 7" and 13" reels, in accordance with EIA Standard.

The tension of removing the cover tape: $F=10 \sim 70g$



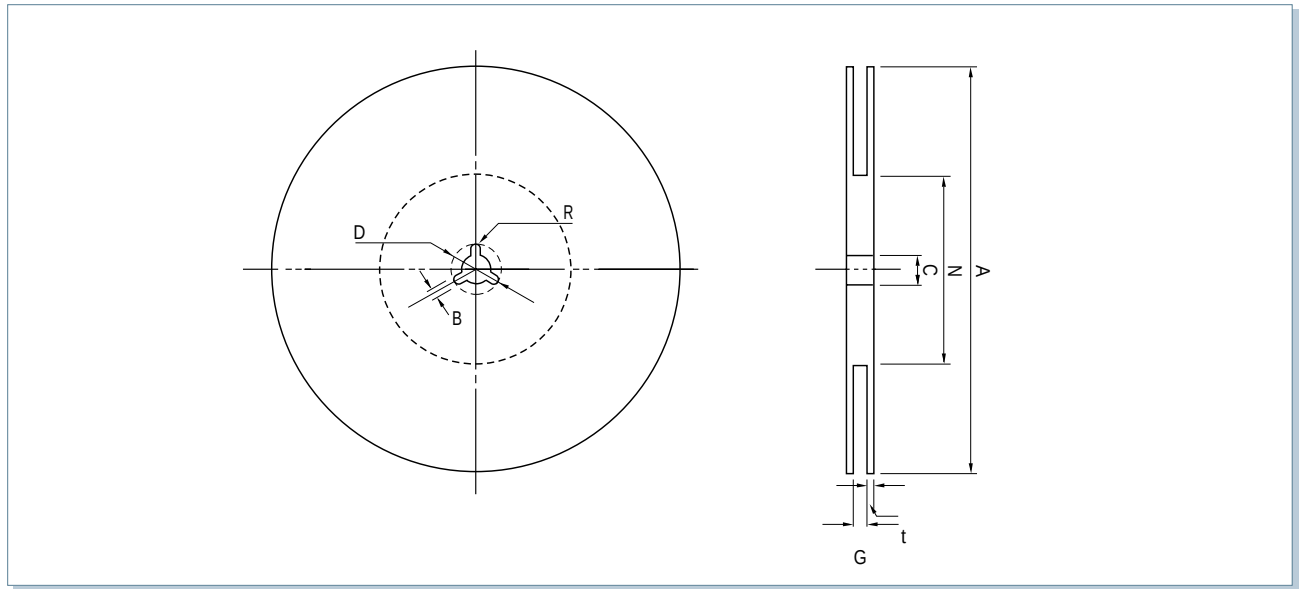
CARRIER TAPE DIMENSION



Unit : mm(inch)

Case Code	$W \pm 0.3$ (± 0.012)	$F \pm 0.1$ (± 0.004)	$E \pm 0.1$ (± 0.004)	$P_0 \pm 0.1$ (± 0.004)	$P_1 \pm 0.1$ (± 0.004)	$P_2 \pm 0.1$ (± 0.004)	$D_1 \pm 0.1$ (± 0.004)	D_2 Min.	t	$A \pm 0.2$ (± 0.008)	$B \pm 0.2$ (± 0.008)	$K \pm 0.2$ (± 0.008)
P	8 (0.315)	3.5 (0.138)	1.75 (0.069)	4 (0.157)	2 (0.079)	4 (0.157)	$\phi 1.5$ (0.059)	$\phi 1.0$ (0.039)	0.2 (0.008)	1.4 (0.055)	2.3 (0.091)	1.4 (0.055)
A										1.9 (0.075)	3.5 (0.138)	1.9 (0.075)
B										3.3 (0.130)	3.8 (0.150)	2.1 (0.083)
C	12 (0.472)	5.5 (0.217)	8 (0.315)					$\phi 1.5$ (0.059)	0.3 (0.012)	3.7 (0.146)	6.4 (0.252)	3.0 (0.118)
D										4.8 (0.189)	7.7 (0.303)	3.3 (0.130)

REEL DIMENSION



Unit : mm(inch)

Tape Width	$A \pm 2$ (± 0.079)	N Min.	$C \pm 0.5$ (± 0.020)	$D \pm 0.5$ (± 0.020)	$B \pm 0.51$ (± 0.020)	$G \begin{smallmatrix} +2 \\ -1 \end{smallmatrix}$ ($\begin{smallmatrix} +0.079 \\ -0.039 \end{smallmatrix}$)	$t \pm 0.5$ (± 0.020)	R
8mm	$\varnothing 178$ (7)	$\varnothing 50$ (1.969)	$\varnothing 13$ (0.512)	$\varnothing 21$ (0.827)	2 (0.079)	10 (0.394)	2 (0.079)	0.99 (0.039)
12mm						14 (0.551)		
8mm	$\varnothing 330$ (13)	$\varnothing 80$ (3.150)	$\varnothing 13$ (0.512)	$\varnothing 21$ (0.827)	2 (0.079)	10 (0.394)	2 (0.079)	0.99 (0.039)
12mm						14 (0.551)		

Quantity per Reel

Case Code	Dia. 178mm	Dia. 330mm
P	3,000 pieces / Reel	
A, B	2,000 pieces / Reel	8,000 pieces / Reel
C, D	500 pieces / Reel	2,500 pieces / Reel