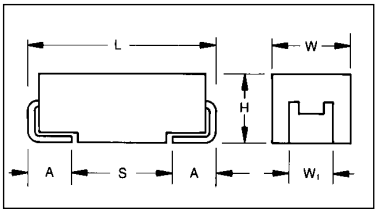
TAJ Series

Low Profile

Five additional case sizes are available in the TAJ range offering low profile solid tantalum chip capacitors. Designed for applications where maximum height of components above or below board are of prime consideration, this height of 1.2, 1.5 and 2.0mm equates to that of a standard integrated circuit package after mounting. The S&T footprints are identical to the A&B case size parts and the W&Y footprints to C&D case size parts.



For part marking see page 48

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	Dimension Low Profile	L±0.2 (0.008)	W+0.2 (0.008) -0.1 (0.004)	H Max.	W_1±0.2 (0.008)	A+0.3 (0.012) -0.2 (0.008)	S Min.
R*	2012	R Case (1.2)	2.05 (0.081)	1.3 (0.051)	1.2 (0.047)	1.2 (0.047)	0.5 (0.020)	0.85 (0.033)
S**	3216L	A Case (1.2)	3.2 (0.126)	1.6 (0.063)	1.2 (0.047)	1.2 (0.047)	0.8 (0.031)	1.1 (0.043)
T**	3528L	B Case (1.5)	3.5 (0.138)	2.8 (0.110)	1.2 (0.047)	2.2 (0.087)	0.8 (0.031)	1.4 (0.055)
W**	6032L	C Case (2.0)	6.0 (0.236)	3.2 (0.126)	1.5 (0.059)	2.2 (0.087)	1.3 (0.051)	2.9 (0.114)
Y**	7343L	D Case (2.4)	7.3 (0.287)	4.3 (0.169)	2.0 (0.079)	2.4 (0.094)	1.3 (0.051)	4.4 (0.173)
†**X****	7343L	D Case (1.5)	7.3 (0.287)	4.3 (0.169)	1.5 (0.059)	2.4 (0.094)	1.3 (0.051)	4.4 (0.173)

*** 0805 Footprint Compatible**
**** Low Profile Versions of A & B & C & D Case**
† Developmental Only

W_1 dimension applies to the termination width for A dimensional area only.
Pad Stand-off is 0.1±0.1.

HOW TO ORDER

TAJ	Y	107	M	010	R	**
Type	**Case Code** See table above	**Capacitance Code** pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	**Tolerance** K=±10% M=±20%	**Rated DC Voltage** 002=2Vdc 004=4Vdc 006=6.3Vdc 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc 035=35Vdc 050=50Vdc	**Packaging Packaging** See Tape and Reel Packaging R=7" T/R S=13" T/R (see page 47)	**Additional characters may be added for special requirements**

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C									
Capacitance Range:	0.1µF to 470µF									
Capacitance Tolerance:	±10%; ±20%									
Rated Voltage (V_R)	≦ +85°C:	2	4	6.3	10	16	20	25	35	50
Category Voltage (V_C)	≦ +125°C:	1.3	2.7	4	7	10	13	17	23	33
Surge Voltage (V_S)	≦ +85°C:	2.7	5.2	8	13	20	26	32	46	65
Surge Voltage (V_S)	≦ +125°C:	1.7	3.2	5	8	12	16	20	28	40
Temperature Range:	-55°C to +125°C									
Reliability:	1% per 1000 hours at 85°C with 0.1Ω/V series impedance, 60% confidence level									

TAJ Series

Low Profile

CAPACITANCE AND VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated voltage (V_R) at 85°C (Voltage Code)							
µF	Code	2V (F)	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)
0.10 0.15 0.22	104 154 224						R/S R/S R/S		
0.33 0.47 0.68	334 474 684					 R/S	R/S R/S R/S/T		
1.0 1.5 2.2	105 155 225		 R/S	 R/S R/S	R/S R/S R/S	R/S/T S T/(R)	R/S/T T/(R) T		
3.3 4.7 6.8	335 475 685	 R R	R/S R/S S/T	R/S S/T T	S/T R/T T	T (S) (T)		 (W)	
10 15 22	106 156 226	S	R/T	R T	(S)/T	(T)/W W	W W (W)	 (X)/Y (Y)	(X)/Y (Y)
33 47 68	336 476 686			W W	W (W) Y	W/Y (X)/Y Y	(X) (Y)		
100 150 220	107 157 227	 W	(W) (X)	 (X) (Y)	(X)/Y (X)/Y (Y)	Y			
330 470	337 477	(X) (Y)	(Y)						

● = In Development

TAJ Series

Low Profile

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance µF	DCL (µA) Max.	DF % Max.	ESR max. (Ω) @ 100 kHz
Voltage/Code	2 volt @ 85°C (1.2 volt @ 125°C) / F				
TAJR475*002	R	4.7	0.5	6	20.0
TAJR685*002	R	6.8	0.5	6	20.0
TAJS106*002	S	10.0	0.5	6	8.0
Voltage/Code	4 volt @ 85°C (2.5 volt @ 125°C) / G				
TAJR225*004	R	2.2	0.5	6	25.0
TAJS225*004	S	2.2	0.5	6	25.0
TAJR335*004	R	3.3	0.5	6	20.0
TAJS335*004	S	3.3	0.5	6	18.0
TAJR475*004	R	4.7	0.5	6	12.0
TAJS475*004	S	4.7	0.5	6	10.0
TAJS685*004	S	6.8	0.5	6	8.0
TAJT685*004	T	6.8	0.5	6	6.0
TAJR106*004	R	10.0	0.5	6	7.0
TAJT106*004	T	10.0	0.5	6	5.0
Voltage/Code	6.3 volt @ 85°C (4 volt @ 125°C) / J				
TAJR155*006	R	1.5	0.5	6	25.0
TAJS155*006	S	1.5	0.5	6	25.0
TAJR225*006	R	2.2	0.5	6	20.0
TAJS225*006	S	2.2	0.5	6	18.0
TAJR335*006	R	3.3	0.5	6	12.0
TAJS335*006	S	3.3	0.5	6	9.0
TAJS475*006	S	4.7	0.5	6	7.5
TAJT475*006	T	4.7	0.5	6	6.0
TAJT685*006	T	6.8	0.5	6	5.0
TAJR106*006	R	10.0	0.6	8	6.0
TAJT156*006	T	15.0	1.0	6	3.5
TAJW336*006	W	33.0	2.1	6	1.8
TAJW686*006	W	68.0	4.3	6	1.5
Voltage/Code	10 volt @ 85°C (6.3 volt @ 125°C) / A				
TAJR105*010	R	1.0	0.5	4	25.0
TAJS105*010	S	1.0	0.5	4	25.0
TAJR155*010	R	1.5	0.5	6	20.0
TAJS155*010	S	1.5	0.5	6	20.0
TAJR225*010	R	2.2	0.5	6	15.0
TAJS225*010	S	2.2	0.5	6	12.0
TAJS335*010	S	3.3	0.5	6	8.0
TAJT335*010	T	3.3	0.5	6	6.0
TAJR475*010	R	4.7	0.5	6	9.0
TAJT475*010	T	4.7	0.5	6	5.0
TAJT685*010	T	6.8	0.7	6	4.0
TAJT106*010	T	10.0	1.0	6	3.0
TAJW336*010	W	33	3.3	6	1.6
TAJY686*010	Y	68	6.8	6	0.9
TAJY107*010	Y	100	10	6	0.9
TAJY157*010	Y	150	15	6	1.2

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

*Insert K for ±10% and M for ±20%.

NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.

AVX Part No.	Case Size	Capacitance µF	DCL (µA) Max.	DF % Max.	ESR max. (Ω) @ 100 kHz
Voltage/Code	16 volt @ 85°C (10 volt @ 125°C) / C				
TAJR684M016	R	0.68	0.5	4	25.0
TAJS684M016	S	0.68	0.5	4	25.0
TAJR105*016	R	1.0	0.5	4	20.0
TAJS105*016	S	1.0	0.5	4	15.0
TAJT105*016	T	1.0	0.5	4	5.0
TAJS155*016	S	1.5	0.5	6	12.0
TAJT225*016	T	2.2	0.5	6	6.5
TAJT335*016	T	3.3	0.5	6	5.0
TAJW106*016	W	10.0	1.6	6	2.0
TAJW226*016	W	22.0	3.5	6	1.6
TAJW336*016	W	33.0	5.3	6	1.5
TAJY336*016	Y	33.0	5.3	6	0.9
TAJY476*016	Y	47.0	7.5	6	0.9
TAJY686*016	Y	68.0	10.9	6	0.9
TAJY107*016	Y	100.0	16.0	6	0.9
Voltage/Code	20 volt @ 85°C (13 volt @ 125°C) / D				
TAJR104M020	R	0.1	0.5	4	25.0
TAJS104M020	S	0.1	0.5	4	25.0
TAJR154M020	R	0.15	0.5	4	25.0
TAJS154M020	S	0.15	0.5	4	25.0
TAJR224M020	R	0.22	0.5	4	25.0
TAJS224M020	S	0.22	0.5	4	25.0
TAJR334M020	R	0.33	0.5	4	25.0
TAJS334M020	S	0.33	0.5	4	25.0
TAJR474M020	R	0.47	0.5	4	25.0
TAJS474M020	S	0.47	0.5	4	25.0
TAJR684M020	R	0.68	0.5	4	20.0
TAJS684M020	S	0.68	0.5	4	15.0
TAJT684M020	T	0.68	0.5	4	15.0
TAJR105*020	R	1.0	0.5	4	20.0
TAJS105*020	S	1.0	0.5	4	12.0
TAJT105*020	T	1.0	0.5	4	9.0
TAJT155*020	T	1.5	0.5	6	6.5
TAJT225*020	T	2.2	0.5	6	6.0
TAJW156*020	W	15.0	3.0	6	1.7
TAJW226*020	W	22.0	4.4	6	1.6
Voltage/Code	25 volt @ 85°C (16 volt @ 125°C) / E				
TAJY156*025	Y	15.0	3.8	6	1.0
Voltage/Code	35 volt @ 85°C (23 volt @ 125°C) / V				
TAJY106*035	Y	10.0	3.5	6	1.0

For parametric information on development codes, please contact your local AVX sales office.

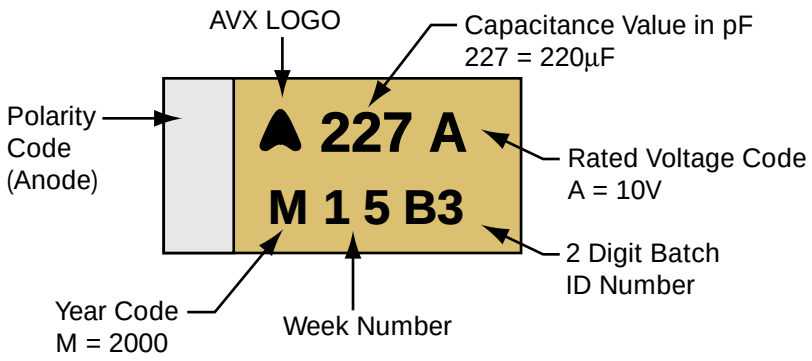
TAJ, THJ & TPS Marking

For TAJ & TPS & THJ, the positive end of body has videcon readable polarity marking as shown in the diagram. Bodies are marked by indelible laser marking on top surface with capacitance value, voltage and date of manufacture and batch ID number. R case is an exception due to the small size in which only the voltage and capacitance values are printed.

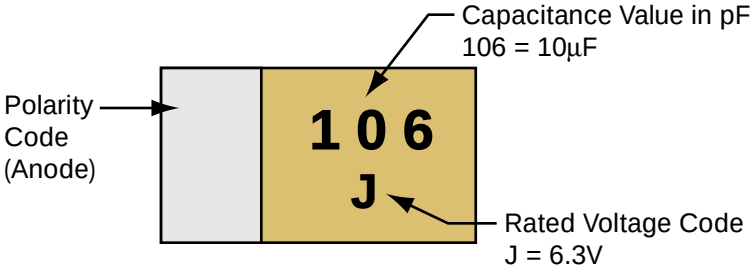
Year	Year Code
1999	L
2000	M
2001	N
2002	P

Voltage Code	Rated Voltage at 85°C
F	2
G	4
J	6.3
A	10
C	16
D	20
E	25
V	35
T	50

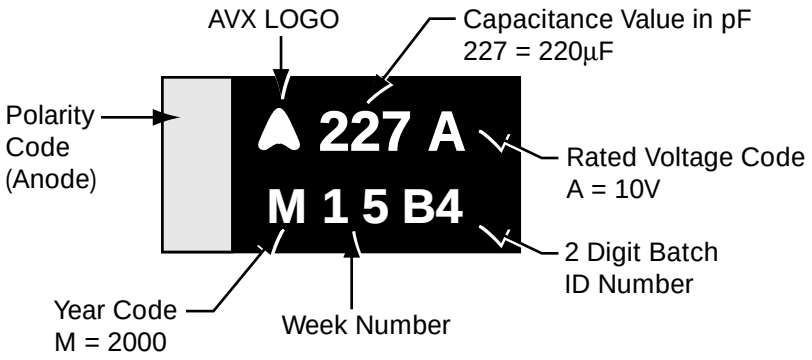
TAJ & TPS - A, B, C, D, E, S, T, V, W, Y AND X CASE:



TAJ - R CASE:



THJ - A, B, C, D AND E CASE:



TAJ, TPS, THJ & TAC Series

Tape and Reel Packaging

Tape and reel packaging for automatic component placement.
Please enter required Suffix on order. Bulk packaging is not available.

TAJ, TPS AND TAC TAPING SUFFIX TABLE

Case Size reference	Tape width mm	P mm	100mm (4") reel		180mm (7") reel		330mm (13") reel	
			Suffix	Qty.	Suffix	Qty.	Suffix	Qty.
A	8	4			R	2000	S	8000
B	8	4			R	2000	S	8000
C	12	8			R	500	S	3000
D	12	8			R	500	S	2500
E	12	8			R	400	S	1500
V	12	8			R	400	S	1500
R	8	4			R	2500	S	10000
S	8	4			R	2500	S	10000
T	8	4			R	2500	S	10000
W	12	8			R	1000	S	5000
Y	12	8			R	1000	S	4000
X	12	8			R	1000	S	5000
TACR	8	4	X	500	R	2500		
TACL	8	4	X	500	R	3500		

TAPE SPECIFICATION

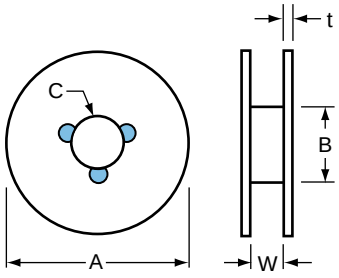
Tape dimensions comply to EIA 481-1

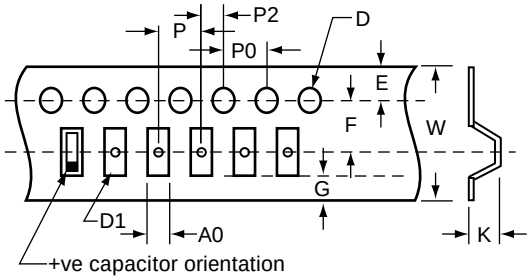
Dimensions A_0 and B_0 of the pocket and the tape thickness, K, are dependent on the component size.

Tape materials do not affect component solderability during storage. Carrier Tape Thickness <0.4mm.

PLASTIC TAPE DIMENSIONS

Code	Ao	Bo	K	W	E	F	G	P	P2	Po	D	D1
A	1.83±0.1	3.57±0.1	1.87±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
B	3.15±0.1	3.77±0.1	2.22±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
C	3.45±0.1	6.4±0.1	2.92±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
D	4.48±0.1	7.62±0.1	3.22±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
E	4.50±0.1	7.5±0.1	4.5±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
V	6.43±0.1	7.44±0.1	3.84±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
W	3.57±0.1	6.4±0.1	1.65±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
X	4.67±0.1	7.62±0.1	1.65±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
Y	4.67±0.1	7.62±0.1	2.15±0.1	12±0.3	1.75±0.1	5.5±0.05	0.75 min	8±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1.5+0.2-0.0
R	1.65±0.1	2.45±0.1	1.3±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
S	1.95±0.1	3.55±0.1	1.3±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
T	3.20±0.1	3.8±0.1	1.35±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
TACR	1.65±0.1	2.45±0.1	1.3±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0
TACL	1.10±0.1	2±0.1	1.1±0.1	8±0.3	1.75±0.1	3.5±0.05	0.75 min	4±0.1	2±0.05	4±0.1	1.5+0.2-0.0	1+0.2-0.0





REEL DIMENSIONS

Code	Tape	A	B	C	W	t
R	12mm	180±2.0	50 min	13±0.5	12.4±1.5,-0	1.5±0.5
R	8mm	180±2.0	50 min	13±0.5	8.4±1.5,-0	1.5±0.5
S	12mm	330±2.0	50 min	13±0.5	12.4±1.5,-0	1.5±0.5
S	8mm	330±2.0	50 min	13±0.5	8.4±1.5,-0	1.5±0.5
X	8mm	100±2.0		13±0.5	8.4±1.5,-0	1.5±0.5

Cover Tape Dimensions
Thickness: 75±25µm
Width of tape:
5.5mm + 0.2mm (8mm tape)
9.5mm + 0.2mm (12mm tape)