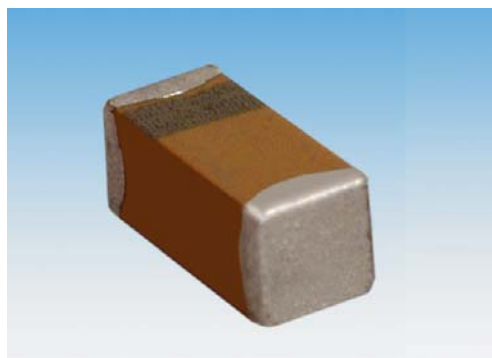


Standard Microchip



The world's smallest surface mount Tantalum capacitor, small enough to create space providing room for ideas to grow.

TACmicrochip® is a major breakthrough in miniaturization without reduction in performance.

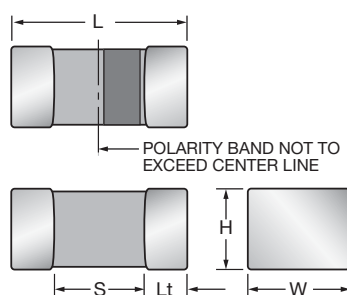
It offers you the highest energy store in a small case size down to 0402; enhanced high frequency operation through unique ESR performance with temperature and voltage stability is also offered.



LEAD-FREE



RoHS
COMPLIANT



CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	Length (L)	Width (W)	Height (H)	Termination Spacing(S)	Minimum Termination Length (Lt)	Average Mass
A	1206	3216-18	3.20±0.20 (0.126±0.008)	1.60±0.20 (0.063±0.008)	1.60±0.20 (0.063±0.008)	1.80 min. (0.071 min.)	0.15 (0.006)	44.6mg
B	1210	3528-15	3.50 +0.20 -0.20 (0.138 -0.008)	2.80 +0.20 -0.10 (0.110 -0.004)	1.50 max.	2.00 min.	0.15 min.	90.0mg
K	0402	1005-07	1.00 +0.20 -0.00 (0.039 -0.000)	0.50 +0.20 -0.00 (0.020 -0.000)	0.50 +0.20 -0.00 (0.020 -0.000)	0.40 min. (0.016 min.)	0.10 (0.004)	2.0mg
L	0603	1608-10	1.60 +0.20 -0.00 (0.063 -0.000)	0.85 +0.15 -0.00 (0.033 -0.000)	0.85 +0.15 -0.00 (0.033 -0.000)	0.55 min. (0.022 min.)	0.15 (0.006)	8.6mg
R	0805	2012-15	2.00 +0.20 -0.00 (0.079 -0.000)	1.35 +0.15 -0.00 (0.053 -0.000)	1.35 +0.15 -0.00 (0.053 -0.000)	0.70 min. (0.027 min.)	0.15 (0.006)	29.9mg

HOW TO ORDER

TAC	L	226	M	004	R	TA
Type	Case Size	Capacitance Code	Tolerance	Rated DC Voltage	Packaging	Alternative characters may be used for special requirements
TACmicrochip®	1206=A 1210=B 0402=K 0603=L 0805=R	pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	K=±10% M=±20%	002=2Vdc 003=3Vdc 004=4Vdc 005=5Vdc 006=6.3Vdc 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc	(see table below)	

Packaging Suffix

Reel Size	Standard Tin Termination Plastic Tape	Standard Tin Termination Plastic Tape	Gold Termination Plastic Tape
Case	A/B/R/L	K	A/B/R/L
7"	RTA	PTA	ATA
4 1/4"	XTA	QTA	FTA

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C										
Capacitance Range:	0.47 µF to 150 µF										
Capacitance Tolerance:	±10%; ±20%										
Leakage Current DCL:	0.01CV or 0.5µA whichever is the greater										
Rated Voltage (V _R)	≅ +85°C:	2	3	4	5	6.3	10	16	20	25	
Category Voltage (V _C)	≅ +125°C:	1.3	2	2.7	3.3	4	7	10	13	17	
Surge Voltage (V _S)	≅ +85°C:	2.7	3.9	5.2	6.5	8	13	20	26	32	
Surge Voltage (V _S)	≅ +125°C:	1.7	2.6	3.2	4	5	8	12	16	20	
Temperature Range:	-55°C to +125°C										
Reliability:	1% per 1000 hours at 85°C, V _R with 0.1Ω/V series impedance, 60% confidence level										
Termination Finish:	Nickel and Tin Plating (standard), Nickel and Gold Plating option available upon request										

Standard Microchip

STANDARD COMMERCIAL RANGE (EIA Sizes) (LETTER DENOTES CASE SIZE)

Capacitance		Voltage Rating DC (V _R) at 85°C							
μF	Code	2.0V	3.0V	4.0V	6.3V	10V	16V	20V	25V
0.10 0.15 0.22	104 154 224							K	
0.33 0.47 0.68	334 474 684					K ^(M) /L K ^(M) /L	L L		
1.0 1.5 2.2	105 155 225		K ^(M) /L	L L	K/L L K ^(M) /L	K/L L L	L L		R
3.3 4.7 6.8	335 475 685	K ^(M) /L K ^(M) /L K ^(M) /L	K ^(M) /L K ^(M) /L L	L L L	L L L/R	L/R L/R L/R		R ^(M) R ^(M)	A
10 15 22	106 156 226	K ^(M) /L R R	L R L ^(M) /R	J/L/R L ^(M) /R L ^(M) /R	L ^(M) /R L ^(M) /R R	L/R R R	R		
33 47 68	336 476 686	R R R ^(M)	R R R ^(M)	R R A ^(M)	R R ^(M) /A A ^(M)	R ^(M) /A ^(M) /B B			
100 150 220	107 157 227	A ^(M)	R ^(M) /A ^(M)	R ^(M) /A ^(M)	A ^(M)				

Developmental Ratings - subject to change

Released codes ^(M tolerance only)

Standard Height Profile: A, B, K, L, R Case

Low Profile: H, J, T, U, V Case

AVX Part No.	EIA Code	EIA Metric	Case Size	Cap (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TACK335M002#	0402	1005-07	K	3.3	2	0.5	8	15
TACL335*002#	0603	1608-10	L	3.3	2	0.5	6	7.5
TACK475M002#	0402	1005-07	K	4.7	2	0.5	12	15
TACL475*002#	0603	1608-10	L	4.7	2	0.5	6	7.5
TACK685M002#	0402	1005-07	K	6.8	2	0.5	20	15
TACL685*002#	0603	1608-10	L	6.8	2	0.5	6	7.5
TACK106M002#	0402	1005-07	K	10	2	0.5	15	15
TACL106*002#	0603	1608-10	L	10	2	0.5	10	7.5
TACR226*002#	0805	2012-15	R	22	2	0.5	8	5
TACR336*002#	0805	2012-15	R	33	2	0.7	10	5
TACR476*002#	0805	2012-15	R	47	2	0.9	10	5
TACR686M002#	0805	2012-15	R	68	2	1.4	14	5
TACA107M002#	1206	3216-18	A	150	2	3	20	1
TACK225M003#	0402	1005-07	K	2.2	3	0.5	6	15
TACL225*003#	0603	1608-10	L	2.2	3	0.5	6	7.5
TACK335M003#	0402	1005-07	K	3.3	3	0.5	8	15
TACL335*003#	0603	1608-10	L	3.3	3	0.5	6	7.5
TACK475M003#	0402	1005-07	K	4.7	3	0.5	12	15
TACL475*003#	0603	1608-10	L	4.7	3	0.5	6	7.5
TACL685*003#	0603	1608-10	L	6.8	3	0.5	6	7.5
TACL106*003#	0603	1608-10	L	10	3	0.5	10	7.5
TACR156*003#	0805	2012-15	R	15	3	0.5	8	5
TACL226M003#	0603	1608-10	L	22	3	0.7	20	7.5
TACR226*003#	0805	2012-15	R	22	3	0.7	8	5
TACR336*003#	0805	2012-15	R	33	3	1	10	5
TACR476*003#	0805	2012-15	R	47	3	1.5	10	5
TACR686M003#	0805	2012-15	R	68	3	2	14	5
TACA107M003#	1206	3216-18	A	100	3	3	15	1
TACR107M003#	0805	2012-15	R	100	3	3	30	5
TACL155*004#	0603	1608-10	L	1.5	4	0.5	6	7.5
TACL225*004#	0603	1608-10	L	2.2	4	0.5	6	7.5
TACL335*004#	0603	1608-10	L	3.3	4	0.5	6	7.5
TACL475*004#	0603	1608-10	L	4.7	4	0.5	6	7.5
TACL685*004#	0603	1608-10	L	6.8	4	0.5	8	7.5
TACL106*004#	0603	1608-10	L	10	4	0.5	10	7.5
TACR106*004#	0805	2012-15	R	10	4	0.5	8	5
TACL156M004#	0603	1608-10	L	15	4	0.6	20	7.5
TACR156*004#	0805	2012-15	R	15	4	0.6	8	5
TACL226M004#	0603	1608-10	L	22	4	0.9	20	7.5
TACR226*004#	0805	2012-15	R	22	4	0.9	8	5
TACR336*004#	0805	2012-15	R	33	4	1.3	10	5
TACR476*004#	0805	2012-15	R	47	4	1.9	14	5
TACA686M004#	1206	3216-18	A	68	4	2.7	15	1
TACA107M004#	1206	3216-18	A	100	4	4	20	1
TACR107M004#	0805	2012-15	R	100	4	4	30	5
TACK105*006#	0402	1005-07	K	1	6.3	0.5	6	15
TACL105*006#	0603	1608-10	L	1	6.3	0.5	6	7.5
TACL155*006#	0603	1608-10	L	1.5	6.3	0.5	6	7.5

AVX Part No.	EIA Code	EIA Metric	Case Size	Cap (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TACK225M006#	0402	1005-07	K	2.2	6.3	0.5	8	15
TACL225*006#	0603	1608-10	L	2.2	6.3	0.5	6	7.5
TACL335*006#	0603	1608-10	L	3.3	6.3	0.5	6	7.5
TACL475*006#	0603	1608-10	L	4.7	6.3	0.5	8	7.5
TACL685*006#	0603	1608-10	L	6.8	6.3	0.5	10	7.5
TACR685*006#	0805	2012-15	R	6.8	6.3	0.5	8	5
TACL106M006#	0603	1608-10	L	10	6.3	0.6	10	6
TACR106*006#	0805	2012-15	R	10	6.3	0.6	8	5
TACL156M006#	0603	1608-10	L	15	6.3	0.9	20	7.5
TACR156*006#	0805	2012-15	R	15	6.3	0.9	8	5
TACR226*006#	0805	2012-15	R	22	6.3	1.4	10	5
TACR336*006#	0805	2012-15	R	33	6.3	2.1	12	5
TACR476M006#	0805	2012-15	R	47	6.3	3	20	5
TACA476*006#	1206	3216-18	A	47	6.3	3	15	1
TACA686M006#	1206	3216-18	A	68	6.3	4.3	15	1
TACA107M006#	1206	3216-18	A	100	6.3	6.3	20	1
TACK475M010#	0402	1005-07	K	0.47	10	0.5	6	15
TACL474*010#	0603	1608-10	L	0.47	10	0.5	6	7.5
TACK684M010#	0402	1005-07	K	0.68	10	0.5	8	15
TACL684*010#	0603	1608-10	L	0.68	10	0.5	6	7.5
TACK105*010#	0402	1005-07	K	1	10	0.5	6	15
TACL105*010#	0603	1608-10	L	1	10	0.5	6	7.5
TACL155*010#	0603	1608-10	L	1.5	10	0.5	6	7.5
TACL225*010#	0603	1608-10	L	2.2	10	0.5	6	7.5
TACL335*010#	0603	1608-10	L	3.3	10	0.5	8	7.5
TACR335*010#	0805	2012-15	R	3.3	10	0.5	8	5
TACL475*010#	0603	1608-10	L	4.7	10	0.5	10	6
TACR475*010#	0805	2012-15	R	4.7	10	0.5	8	6
TACL685*010#	0603	1608-10	L	6.8	10	0.7	20	7.5
TACR685*010#	0805	2012-15	R	6.8	10	0.7	8	5
TACL106*010#	0603	1608-10	L	10	10	1	20	7.5
TACR106*010#	0805	2012-15	R	10	10	1	8	5
TACR156*010#	0805	2012-15	R	15	10	1.5	10	5
TACR226*010#	0805	2012-15	R	22	10	2.2	14	5
TACA336M010#	1206	3216-18	A	33	10	3.3	12	1
TACB336*010#	1210	3528-15	B	33	10	3.3	15	1
TACR336M010#	0805	2012-15	R	33	10	3.3	20	5
TACB476*010#	1210	3528-15	B	47	10	4.7	15	1
TACL474*016#	0603	1608-10	L	0.47	16	0.5	6	7.5
TACL684*016#	0603	1608-10	L	0.68	16	0.5	6	7.5
TACL105*016#	0603	1608-10	L	1	16	0.5	6	7.5
TACL225*016#	0603	1608-10	L	2.2	16	0.5	10	7.5
TACR106*016#	0805	2012-15	R	10	16	1.6	10	5
TACK104*020#	0402	1005-07	K	0.10	20	0.5	6	15
TACR335M020#	0805	2012-15	R	3.3	20	0.7	8	5
TACR475M020#	0805	2012-15	R	4.7	20	0.9	8	5
TACR105*025#	0805	2012-15	R	1	25	0.5	8	5
TACA475*025#	1206	3216-18	A	4.7	25	1.2	8	1

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% Capacitance Tolerance

Refer to packaging suffix for options

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.