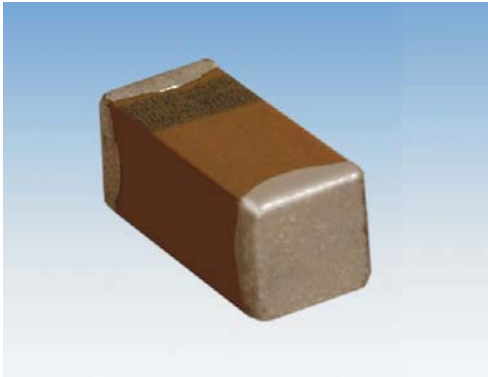


Standard Microchip



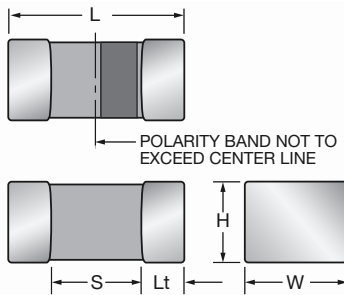
The world's smallest surface mount Tantalum capacitor, small enough to create space providing room for ideas to grow.

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.



HALOGEN-FREE COMPOUNDS
ENVIRONMENTAL FRIENDLY COMPONENT



CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	Length (L)	Width (W)	Height (H)	Termination Spacing(S)	Minimum Termination Length (Lt)	Average Mass
K	0402	1005-07	1.00 ^{+0.20} _{-0.00} (0.039 ^{+0.008} _{-0.000})	0.50 ^{+0.20} _{-0.00} (0.020 ^{+0.008} _{-0.000})	0.50 ^{+0.20} _{-0.00} (0.020 ^{+0.008} _{-0.000})	0.40 min.	0.10 (0.004)	2.0mg
L	0603	1608-10	1.60 ^{+0.20} _{-0.00} (0.063 ^{+0.008} _{-0.000})	0.85 ^{+0.15} _{-0.00} (0.033 ^{+0.006} _{-0.000})	0.85 ^{+0.15} _{-0.00} (0.033 ^{+0.006} _{-0.000})	0.55 min.	0.15 (0.006)	8.6mg
R	0805	2012-15	2.00 ^{+0.20} _{-0.00} (0.079 ^{+0.008} _{-0.000})	1.35 ^{+0.15} _{-0.00} (0.053 ^{+0.006} _{-0.000})	1.35 ^{+0.15} _{-0.00} (0.053 ^{+0.006} _{-0.000})	0.70 min.	0.15 (0.006)	29.9mg
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.	0.15 (0.006)	44.6mg

HOW TO ORDER

TAC	L	226	M	004	R	TA
Type TACmicrochip™	Case Size 0402=K 0603=L 0805=R 1206=A	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 003=3Vdc 004=4Vdc 005=5Vdc 006=6.3Vdc 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc 035=35Vdc	Packaging (see table below)	Alternative characters may be used for special requirements

Packaging Suffix

Reel Size	Standard Tin Termination Plastic Tape	Standard Tin Termination Paper Tape	Gold Termination Plastic Tape
Case	A/R/L	K	A/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 35
Category Voltage (V _C)	≧ +125°C: 1.3 2 2.7 3.3 4 7 10 13 17 23
Surge Voltage (V _S)	≧ +85°C: 2.7 3.9 5.2 6.5 8 13 20 26 32 46
Surge Voltage (V _S)	≧ +125°C: 1.7 2.6 3.2 4 5 8 12 16 20 28
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 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	5.0V	6.3V	10V	16V	20V	25V	35V
0.33	334										
0.47	474						K/L	L			
0.68	684						K/L	L			
1.0	105					K/L	K/L	L		R	
1.5	155			L		L	L	L			
2.2	225		K/L	L		K/L	L	L			
3.3	335	K/L	K/L	L		L	L/R				
4.7	475	K/L	K/L	L		L	L/R		R		
6.8	685	L	L	L		L/R	R				
10	106	K/L	L	L/R		L/R	L/R	R			
15	156		R	L/R		L/R	R				
22	226	R	L/R	L/R	L	R	R				
33	336	R	R	R		R	A				
47	476	L/R	R	R		A	A				
68	686	R	R	A							
100	107		R/A	A		A					
150	157	A									
220	227	A									

Developmental Ratings - subject to change

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

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

Custom Low Profile: X Case

RATINGS & PART NUMBER REFERENCE

AVX Part No.	EIA	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TACK335M002#	0402	K	3.3	2	0.5	8	15
TACL335*002#	0603	L	3.3	2	0.5	6	7.5
TACK475M002#	0402	K	4.7	2	0.5	12	15
TACL475*002#	0603	L	4.7	2	0.5	6	7.5
TACL685*002#	0603	L	6.8	2	0.5	6	7.5
TACK106M002#	0402	K	10	2	0.5	15	15
TACL106*002#	0603	L	10	2	0.5	10	7.5
TACR226*002#	0805	R	22	2	0.5	8	5
TACR336*002#	0805	R	33	2	0.7	10	5
TACR476*002#	0805	R	47	2	0.9	10	5
TACR686M002#	0805	R	68	2	1.4	14	5
TACA157M002#	1206	A	150	2	3.0	20	1
TACK225M003#	0402	K	2.2	3	0.5	6	15
TACL225*003#	0603	L	2.2	3	0.5	6	7.5
TACK335M003#	0402	K	3.3	2	0.5	8	15
TACL335*003#	0603	L	3.3	3	0.5	6	7.5
TACK475M003#	0402	K	4.7	3	0.5	12	15
TACL475*003#	0603	L	4.7	3	0.5	6	7.5
TACL685*003#	0603	L	6.8	3	0.5	6	7.5
TACL106*003#	0603	L	10	3	0.5	10	7.5
TACR156*003#	0805	R	15	3	0.5	8	5
TACL226M003#	0603	L	22	3	0.7	20	7.5
TACR226*003#	0805	R	22	3	0.7	8	5
TACR336*003#	0805	R	33	3	1.0	10	5
TACR476*003#	0805	R	47	3	1.5	10	5
TACR686M003#	0805	R	68	3	2.0	14	5
TACA107M003#	1206	A	100	3	3.0	15	1
TACL155*004#	0603	L	1.5	4	0.5	6	7.5
TACL225*004#	0603	L	2.2	4	0.5	6	7.5
TACL335*004#	0603	L	3.3	4	0.5	6	7.5
TACL475*004#	0603	L	4.7	4	0.5	6	7.5
TACL685*004#	0603	L	6.8	4	0.5	8	7.5
TACL106M004#	0603	L	10	4	0.5	10	7.5
TACR106*004#	0805	R	10	4	0.5	8	5
TACL156M004#	0603	L	15	4	0.6	20	7.5
TACR156*004#	0805	R	15	4	0.6	8	5
TACL226M004#	0603	L	22	4	0.9	20	7.5
TACR226*004#	0805	R	22	4	0.9	8	5
TACR336*004#	0805	R	33	4	1.3	10	5
TACR476M004#	0805	R	47	4	1.9	14	5
TACA686M004#	1206	A	68	4	2.7	15	1
TACA107M004#	1206	A	100	4	4.0	20	1
TACL226M005#	0603	L	22	5	1.1	20	7.5

AVX Part No.	EIA	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TACK105M006#	0402	K	1.0	6.3	0.5	6	15
TACL105*006#	0603	L	1.0	6.3	0.5	6	7.5
TACL155*006#	0603	L	1.5	6.3	0.5	6	7.5
TACK225M006#	0402	K	2.2	6.3	0.5	8	15
TACL225*006#	0603	L	2.2	6.3	0.5	6	7.5
TACL335*006#	0603	L	3.3	6.3	0.5	6	7.5
TACL475*006#	0603	L	4.7	6.3	0.5	8	7.5
TACL685*006#	0603	L	6.8	6.3	0.5	10	7.5
TACR685*006#	0805	R	6.8	6.3	0.5	8	5
TACL106M006#	0603	L	10	6.3	0.6	10	6
TACR106*006#	0805	R	10	6.3	0.6	8	5
TACL156M006#	0603	L	15	6.0	0.9	20	7.5
TACR156*006#	0805	R	15	6.3	0.9	8	5
TACR226*006#	0805	R	22	6.3	1.4	10	5
TACR336*006#	0805	R	33	6.3	2.1	12	5
TACA476M006#	1206	A	47	6.3	3.0	15	1
TACA107M006#	1206	A	100	6.3	6.3	20	1
TACK474M010#	0402	K	0.47	10	0.5	6	15
TACL474*010#	0603	L	0.47	10	0.5	6	7.5
TACK684M010#	0402	K	0.68	10	0.5	8	15
TACL684*010#	0603	L	0.68	10	0.5	6	7.5
TACK105M010#	0402	K	1.0	10	0.5	6	15
TACL105*010#	0603	L	1.0	10	0.5	6	7.5
TACL155*010#	0603	L	1.5	10	0.5	6	7.5
TACL225*010#	0603	L	2.2	10	0.5	6	7.5
TACL335*010#	0603	L	3.3	10	0.5	8	7.5
TACR335*010#	0805	R	3.3	10	0.5	8	5
TACL475M010#	0603	L	4.7	10	0.5	10	6
TACR475*010#	0805	R	4.7	10	0.5	8	6
TACR685*010#	0805	R	6.8	10	0.7	8	5
TACL106M010#	0603	L	10	10	1.0	20	7.5
TACR106*010#	0805	R	10	10	1.0	8	5
TACR156*010#	0805	R	15	10	1.5	10	5
TACR226M010#	0805	R	22	10	2.2	14	5
TACA336M010#	1206	A	33	10	3.3	12	1
TACL474*016#	0603	L	0.47	16	0.5	6	7.5
TACL684*016#	0603	L	0.68	16	0.5	6	7.5
TACL105*016#	0603	L	1.0	16	0.5	6	7.5
TACL225M016#	0603	L	2.2	16	0.5	10	7.5
TACR106*016#	0805	R	10	16	1.6	10	5
TACR475M020#	0805	R	4.7	20	0.9	8	5
TACR105*025#	0805	R	1.0	25	0.5	8	5

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.