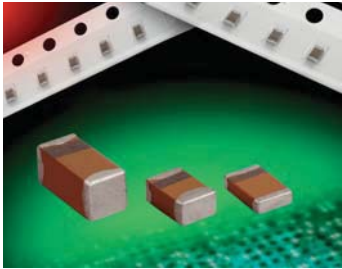


Low Profile

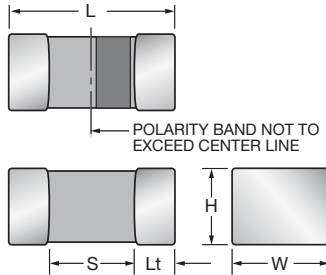


- The world's smallest surface mount tantalum capacitor
- CV range: 1.0-220µF / 2-16V
- 5 case sizes available in low profile option
- Industrial and hi-rel medical applications



CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	Length (L)	Width (W)	Height (H)	Termination Spacing(S)	Minimum Termination Length (Lt)	Average Mass
H	0805	2012-10	2.00 ^{+0.20} / _{-0.00} (0.079 ^{+0.008} / _{-0.000})	1.35 ^{+0.15} / _{-0.00} (0.053 ^{+0.006} / _{-0.000})	1.00 max. (0.039 max.)	0.70 min. (0.027 min.)	0.15 (0.006)	17.1mg
J	0603	1608-08	1.60 ^{+0.20} / _{-0.00} (0.063 ^{+0.008} / _{-0.000})	0.85 ^{+0.15} / _{-0.00} (0.033 ^{+0.006} / _{-0.000})	0.75 max. (0.030 max.)	0.55 min. (0.022 min.)	0.15 (0.006)	5.8mg
T	1210	3528-12	3.50 ^{+0.20} / _{-0.20} (0.138 ^{+0.008} / _{-0.008})	2.80 ^{+0.20} / _{-0.10} (0.110 ^{+0.008} / _{-0.004})	1.20 max. (0.047 max.)	2.00 min. (0.079 min.)	0.15 (0.006)	65mg
U	0805	2012-06	2.00 ^{+0.20} / _{-0.00} (0.079 ^{+0.008} / _{-0.000})	1.35 ^{+0.15} / _{-0.00} (0.053 ^{+0.006} / _{-0.000})	0.60 max. (0.024 max.)	0.70 min. (0.027 min.)	0.15 (0.006)	8.9mg
V	1206	3216-08	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ^{+0.20} / _{-0.10} (0.063 ^{+0.008} / _{-0.004})	0.75 max. (0.030 max.)	1.80 min. (0.071 min.)	0.15 (0.006)	19.1mg



HOW TO ORDER

TAC	U	475	M	004	R	TA
Type TACmicrochip®	Case Size 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 003=3Vdc 004=4Vdc 006=6.3Vdc 010=10Vdc 016=16Vdc	Packaging R = 7" Standard Tin Termination Plastic Tape X = 4 1/4" Standard Tin Termination Plastic Tape A = 7" Gold Termination Plastic Tape F = 4 1/4" Gold Termination Plastic Tape	Alternative characters may be used for special requirements

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C							
Capacitance Range:	1.0 µF to 220 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	6.3	10	16	
Category Voltage (V _C)	≤ +125°C:	1.3	2	2.7	4	7	10	
Surge Voltage (V _S)	≤ +85°C:	2.7	3.9	5.2	8	13	20	
Surge Voltage (V _S)	≤ +125°C:	1.7	2.6	3.2	5	8	12	
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							

Low Profile

LOW PROFILE & CUSTOM RANGE (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
1.0	105						U ^(M)
1.5	155					U ^(M)	
2.2	225						
3.3	335				U ^(M)		
4.7	475			U ^(M)			
6.8	685						
10	106	U ^(M)		J ^(M)		H/V	
15	156				H	V ^(M)	
22	226				H		
33	336			H			
47	476		H ^(M)			T	
68	686						
100	107					T ^(M)	
150	157						
220	227		T ^(M)				

Released codes ^(M tolerance only)

Engineering samples - please contact manufacturer

*Codes under development - subject to change.

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

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

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards.

RATINGS & PART NUMBER REFERENCE

AVX Part No.	EIA Code	EIA Metric	Case Size	Cap (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz	MSL
2 Volt @ 85°C (1.3 Volt @ 125°C)									
TACU106M002#TA	0805	2012-06	U	10	2	0.5	8	5	1
3 Volt @ 40°C (2 Volt @ 125°C)									
TACH476M003#TA	0805	2012-10	H	47	3	1.4	20	5	1
TACT227M003#TA	1210	3528-12	T	220	3	6.6	20	1	1
4 Volt @ 85°C (2.7 Volt @ 125°C)									
TACU475M004#TA	0805	2012-06	U	4.7	4	0.5	8	5	1
TACJ106M004#TA	0603	1608-08	J	10	4	0.5	20	7.5	1
TACH336*004#TA	0805	2012-10	H	33	4	1.3	14	5	1
6.3 Volt @ 85°C (4 Volt @ 125°C)									
TACU335M006#TA	0805	2012-06	U	3.3	6.3	0.5	8	5	1
TACH156*006#TA	0805	2012-10	H	15	6.3	0.9	8	5	1
TACH226*006#TA	0805	2012-10	H	22	6.3	1.4	10	5	1
TACT686*006#TA	1210	3528-12	T	68	6.3	4.3	15	1	1
TACT107M006#TA	1210	3528-12	T	100	6.3	6.3	12	1	1
10 Volt @ 85°C (7 Volt @ 125°C)									
TACU225M010#TA	0805	2012-06	U	2.2	10	0.5	8	5	1
TACH106*010#TA	0805	2012-10	H	10	10	1.0	8	5	1
TACV106*010#TA	1206	3216-08	V	10	10	1.0	10	2	1
TACV156M010#TA	1206	3216-08	V	15	10	1.5	10	2	1
TACT476*010#TA	1210	3528-12	T	47	10	4.7	12	1	1
16 Volt @ 85°C (10 Volt @ 125°C)									
TACU105M016#TA	0805	2012-06	U	1	16	0.5	8	5	1

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

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.

For typical weight and composition see page 124.

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.