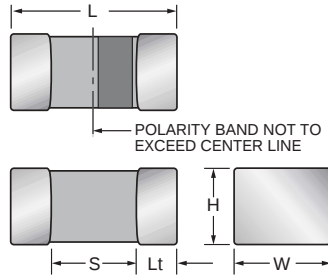
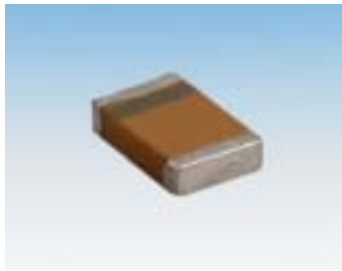


Low Profile



The flexibility of the TACmicrochip™ product line is once more demonstrated by our ability to produce parts with a

profile as low as 0.60mm (maximum) with a maximum CV of 4.7μF at 4V in an 0805 (2012M) footprint.

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	Length (L)	Width (W)	Height (H)	Termination Spacing(S)	Minimum Termination Length (Lt)	Average Mass
N	0402	1005-05	1.00 ±0.05 (0.039 ±0.002)	0.50 ^{+0.00} _{-0.10} (0.020 ^{+0.000} _{-0.004})	0.50 ^{+0.00} _{-0.10} (0.020 ^{+0.000} _{-0.004})	0.40 min.	0.10 (0.004)	1.5mg
U	0805	2012-06	2.00 ^{+0.25} _{-0.15} (0.079 ^{+0.010} _{-0.006})	1.35 ^{+0.20} _{-0.10} (0.053 ^{+0.008} _{-0.004})	0.60 max. (0.024 max.)	0.85 min.	0.15 (0.006)	8.9mg
H	0805	2012-10	2.00 ^{+0.25} _{-0.15} (0.079 ^{+0.010} _{-0.006})	1.35 ^{+0.20} _{-0.10} (0.053 ^{+0.008} _{-0.004})	1.00 max. (0.039 max.)	0.85 min.	0.15 (0.006)	17.1mg
T	3528	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.)	2.30 min.	0.15 (0.006)	65mg
W	6032	6032-15	6.00 ^{+0.20} _{-0.20} (0.236 ^{+0.008} _{-0.008})	3.20 ^{+0.20} _{-0.20} (0.126 ^{+0.008} _{-0.008})	1.50 max. (0.059 max.)	3.50 min.	0.25 (0.010)	135mg

Developmental Ratings - subject to change

CUSTOM CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	Length (L)	Width (W)	Height (H)	Termination Spacing(S)	Minimum Termination Length (Lt)	Average Mass
X	1105	3015-15	3.00±0.10 (0.118±0.004)	1.45±0.10 (0.057±0.004)	1.45±0.10 (0.057±0.004)	2.00 min.	0.15 (0.006)	39.4mg

HOW TO ORDER

TAC	U	475	M	004	R	**
Type TACmicrochip™	Case Code 0402=N 0805=U 0805=H 3528=T 6032=W 1105=X	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 (see table below)	Additional characters may be add for special requirements

Packaging Suffix

RTA – Std. termination (Nickel & Tin) supplied on plastic embossed tape on a 4mm pitch in a 7" diameter reel.

XTA – Std. termination (Nickel & Tin) supplied on plastic embossed tape on a 4mm pitch in a 4.25" diameter reel.

PTA – Std. termination (Nickel & Tin) supplied on punched paper tape on a 2mm pitch in a 7" diameter reel.

QTA – Std. termination (Nickel & Tin) supplied on punched paper tape on a 2mm pitch in a 4.25" diameter reel.

ATA – Nickel & thin Gold plated termination, supplied on plastic embossed tape on a 4mm pitch in a 7" diameter reel.

FTA – Nickel & thin Gold plated termination, supplied on plastic embossed tape on a 4mm pitch in a 4.25" diameter reel.

Packaging Suffix

Reel Size	Standard Tin Termination Plastic Tape 1105/0805	Standard Tin Termination Paper Tape 0402 (N)	Gold Termination Plastic Tape 1105/0805
7"	Rxx	Pxx	Axx
4 1/4"	Xxx	Qxx	Fxx

TECHNICAL SPECIFICATIONS

Technical Data:

All technical data relate to an ambient temperature of +25°C

Capacitance Range:

1.0μF to 68μF

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 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 (VR) at 85°C					
Cap. (µF)	Code	2.0V	3.0V	4.0V	6.3V	10V	16V
0.33 0.47 0.68	334 474 684						
1.0 1.5 2.2	105 155 225				N	U	U
3.3 4.7 6.8	335 475 685			U	U U		
10 15 22	106 156 226	U			H H	H	
33 47 68	336 476 686		X		T	T	
100 150 220	107 157 227				T	W	
330 470 680	107 157 227						

Developmental Ratings - subject to change

RATINGS & PART NUMBER REFERENCE

AVX Part No.	EIA	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TACN105M006#	0402	N	1.0	6.3	0.5	8.0	20.0
TACU106M002#	0805	U	10	2.0	0.5	8.0	6.0
TACU475M004#	0805	U	4.7	4.0	0.5	8.0	6.0
TACU335M006#	0805	U	3.3	6.3	0.5	8.0	6.0
TACU225M010#	0805	U	2.2	10.0	0.5	8.0	6.0
TACU105M016#	0805	U	1.0	16.0	0.5	8.0	6.0
TACH156*006#	0805	H	15	6.3	0.9	8.0	6.0
TACH226*006#	0805	H	22	6.3	1.4	10.0	6.0
TACH106M010#	0805	H	10	10.0	1.0	8.0	6.0
TACT476M010#	3528-12**	T	47	10.0	4.7	10.0	1.0
TACT686M006#	3528-12**	T	68	6.3	4.3	12.0	1.0
TACT107M006#	3528-12**	T	100	6.3	6.3	12.0	1.0
TACW107M010#	6032-15	W	100	10.0	10	30.0 ⁽¹⁾	1.0 ⁽¹⁾
TACX686*003#	special	X	68	3.0	1.5	12.0	1.0

Developmental Ratings - subject to change

⁽¹⁾ Subject to confirmation

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

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.

** Metric

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

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

Custom Low Profile: X Case