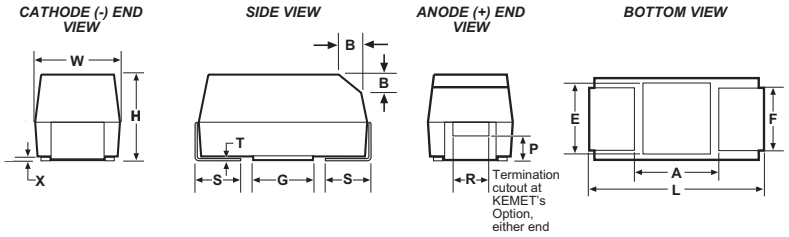
T491 Series

Standard Tantalum

Solid Tantalum Surface Mount

- Meets or Exceeds EIA Standard 535BAAC
- Taped and Reeled per EIA 481-1
- Symmetrical, Compliant Terminations
- Optional Gold-plated Terminations
- Laser-marked Case
- 100% Surge current test on C, D, E, U, V, X sizes
- Halogen Free Epoxy
- Capacitance: 0.1 µF to 1000 µF
- Tolerance: ±10%, ±20%
- Voltage: 2.5-50 VDC
- Extended Range Values
- Low Profile Case Sizes
- RoHS Compliance & Lead Free Terminations (See www.kemet.com for transition information)
- Operating Temperature: -55°C to +125°C

CAPACITOR OUTLINE DRAWING



STANDARD T491 DIMENSIONS

Millimeters (inches)

Case Size		Component												
KEMET	EIA	L*	W*	H*	F* ± 0.1 ± (.004)	S* ± 0.3 ± (.012)	B ± 0.15 (Ref) ± .006	X (Ref)	P (Ref)	R (Ref)	T (Ref)	A (Min)	G (Ref)	E (Ref)
A	3216-18	3.2 ± 0.2 (.126 ± .008)	1.6 ± 0.2 (.063 ± .008)	1.6 ± 0.2 (.063 ± .008)	1.2 (.047)	0.8 (.031)	0.4 (.016)	0.10 ± 0.10 (.004 ± .004)	0.4 (.016)	0.4 (.016)	0.13 (.005)	1.4 (.055)	1.1 (.043)	1.3 (.051)
B	3528-21	3.5 ± 0.2 (.138 ± .008)	2.8 ± 0.2 (.110 ± .008)	1.9 ± 0.2 (.075 ± .008)	2.2 (.087)	0.8 (.031)	0.4 (.016)	0.10 ± 0.10 (.004 ± .004)	0.5 (.020)	1.0 (.039)	0.13 (.005)	1.1 (.043)	1.8 (.071)	2.2 (.087)
C	6032-28	6.0 ± 0.3 .236 ± .012	3.2 ± 0.3 (.126 ± .012)	2.5 ± 0.3 (.098 ± .012)	2.2 (.087)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 (.004 ± .004)	0.9 (.035)	1.0 (.039)	0.13 (.005)	3.1 (.122)	2.8 (.110)	2.4 (.094)
D	7343-31	7.3 ± 0.3 (.287 ± .012)	4.3 ± 0.3 (.169 ± .012)	2.8 ± 0.3 (.110 ± .012)	2.4 (.094)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 (.004 ± .004)	0.9 (.035)	1.0 (.039)	0.13 (.005)	3.8 (.150)	3.5 (.138)	3.5 (.138)
X	7343-43	7.3 ± 0.3 (.287 ± .012)	4.3 ± 0.3 (.169 ± .012)	4.0 ± 0.3 (.157 ± .012)	2.4 (.094)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 (.004 ± .004)	1.7 (.067)	1.0 (.039)	0.13 (.005)	3.8 (.150)	3.5 (.138)	3.5 (.138)
E	7260-38	7.3 ± 0.3 (.287 ± .012)	6.0 ± 0.3 (.236 ± .012)	3.6 ± 0.2 (.142 ± .008)	4.1 (.161)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 (.004 ± .004)	0.9 (.035)	1.0 (.039)	0.13 (.005)	3.8 (.150)	3.5 (.138)	3.5 (.138)

Notes: 1. Metric dimensions govern
2. (Ref) Dimensions provided for reference only
* Mil-PRF-55365/8 Specified Dimensions

LOW PROFILE T491 DIMENSIONS

Millimeters (inches)

Case Size		Component									
KEMET	EIA	L*	W*	H max	F* ± 0.1 ± (.004)	S* ± 0.3 ± (.012)	X (Ref)	T (Ref)	A (Min)	G (Ref)	E (Ref)
R	2012-12	2.0 ± 0.2 (.079 ± .008)	1.3 ± 0.2 (.051 ± .008)	1.2 (.047)	0.9 (.035)	0.5 (.020)	0.05 (.002)	0.13 (.005)	0.8 (.031)	0.5 (.020)	0.8 (.031)
S	3216-12	3.2 ± 0.2 (.126 ± .008)	1.6 ± 0.2 (.063 ± .008)	1.2 (.047)	1.2 (.047)	0.8 (.031)	0.05 (.002)	0.13 (.005)	1.4 (.055)	1.1 (.043)	1.3 (.051)
T	3528-12	3.5 ± 0.2 (.138 ± .008)	2.8 ± 0.2 (.110 ± .008)	1.2 (.047)	2.2 (.087)	0.8 (.031)	0.05 (.002)	0.13 (.005)	1.1 (.083)	1.8 (.071)	2.2 (.087)
U	6032-15	6.0 ± 0.3 (.236 ± .012)	3.2 ± 0.3 (.126 ± .012)	1.5 (.059)	2.2 (.087)	1.3 (.051)	0.05 (.002)	0.13 (.005)	3.1 (.122)	2.8 (.110)	2.4 (.094)
V	7343-20	7.3 ± 0.3 (.287 ± .012)	4.3 ± 0.3 (.169 ± .012)	2.0 (.079)	2.4 (.094)	1.3 (.051)	0.05 (.002)	0.13 (.005)	3.8 (.150)	3.5 (.138)	3.5 (.138)

Notes: 1. Metric dimensions govern
2. (Ref) Dimensions provided for reference only
3. No dimensions provided for B,P or R because low profile cases do not have a bevel or a notch.

T491 ORDERING INFORMATION

T 491 S 685 K 004 A T

Tantalum

Series
491 – Industrial

Case Size
A,B,C,D,E,R,S,T,U,V,X

Capacitance Picofarad Code
First two digits represent significant figures. Third digit specifies number of zeros.

Capacitance Tolerance
M = ±20%
K = ±10%

Voltage
As Shown

Failure Rate
A = Not Applicable

Lead Material
T = 100% Matte Tin (Sn) Plated*
H = Standard Solder Coated (SnPb 5% Pb minimum)
G = Gold Plated (A,B,C,D,X only

***Part number example: T491B105M035AT (14 digits - no spaces). See www.kemet.com for Pb Free transition.**
**** "S" Termination codes are converting from 90Sn/10 Pb to 100% tin finishes. Orders including "S" suffix**

SOLID TANTALUM CHIP CAPACITORS

T491 SERIES—Precision Molded Chip

KEMET CHARGED.

T491 TANTALUM CHIP CAPACITANCE VALUES
Case Size by Capacitance and Voltage

Capacitance		Rated Voltage @ +85°C									
µF	Code	2.5	3	4	6	10	16	20	25	35	50
0.10	104									A	A
0.15	154									A	A/B
0.22	224									A	B
0.33	334								A	A	B
0.47	474								A	A/B	B/C
0.68	684							A	A	A/B	B/C
1.0	105						A	R/S/A	A/B	A/B	V/B/C
1.5	155					A	A	S/A	R/A/B	B/C	C/D
2.2	225				R/A	A/B	R/S/A	R/A/B	B/C	B/C	C/D
3.3	335			A	A	R/S/A	A/B	T/A/B	B/C	B/C	D
4.7	475			A	S/A	A/B R/S	A/B/T	A/B/C	A/B/C	B/C/D	D
6.8	685			S/A	R/S A/B	S/T A/B	A/B/C	U/A/B/C	B/C	C/D	D/X
10.0	106			R/S A/B	R/S/T A/B	S/T/A B/C	B/C/U T/A	U/B/C	B/C/D	V/C/D	D/X
15.0	156			S/T A/B	S/T A/B/C	T/U A/B/C	U/A/B/C	C/D	C/D	C/D/X	X
22.0	226			S/T A/B/C	U/T A/B/C	T/U A/B/C	U/B C/D	V/C/D	V/C/D	D/X	
33.0	336		A	T/U A/B/C	T/U A/B/C	U/V/A T/B/C/D	U/C/D	V/C/D	D/X	X	
47.0	476			T/U A/B/C	T/U/A B/C/D	U/V B/C/D	V/C/D	D	D/X	X/E	
68.0	686			U/A B/C/D	U/B C/D	U/V B/C/D	V/C/D	D/X	D/X		
100.0	107	T		T/U/A B/C/D	U/V B/C/D	V/C/D	V/D/X	D/X/E			
150.0	157			V/B C/D	V/C/D	V/C D/X	D/X				
220.0	227			V/B	V/C D/X	V/D/X	X				
330.0	337			V/C/D	D/X	D/X/E					
470.0	477			D/X	D/X/E	X/E					
680.0	687			D/X	E						
1000.0	108			X/E							

SOLID TANTALUM CHIP CAPACITORS

T491 SERIES - Precision Molded Chip

T491 RATINGS & PART NUMBER REFERENCE

Capacitance µF	Case Size	KEMET Part Number	DC Leakage µA @ 25ºC Max	DF % @ +25ºC 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
2.5 Volt Rating at +85ºC (1.7 Volt Rating at +125ºC)					
100.0	T	T491T107(1)2R5A(2)	2.5	24.0	3.9
220.0	D	T491D227(1)2R5A(2)	5.5	8.0	0.3
3 Volt Rating at +85ºC (2 Volt Rating at +125ºC)					
#33.0	A	T491A336(1)003A(2)	1.0	6.0	4.0
4 Volt Rating at +85ºC (2.7 Volt Rating at +125ºC)					
3.3	A	T491A335(1)004A(2)	0.5	6.0	8.0
4.7	A	T491A475(1)004A(2)	0.5	6.0	8.0
6.8	A	T491A685(1)004A(2)	0.5	6.0	6.0
6.8	S	T491S685(1)004A(2)	0.5	6.0	15.0
10.0	B	T491B106(1)004A(2)	0.5	6.0	3.5
10.0	A	T491A106(1)004A(2)	0.5	6.0	6.0
#10.0	S	T491S106(1)004A(2)	0.5	6.0	15.0
#10.0	R	T491R106(1)004A(2)	0.5	8.0	10.0
15.0	B	T491B156(1)004A(2)	0.6	6.0	3.5
15.0	A	T491A156(1)004A(2)	0.6	6.0	4.0
15.0	T	T491T156(1)004A(2)	0.6	6.0	5.0
#15.0	S	T491S156(1)004A(2)	0.6	10.0	15.0
22.0	C	T491C226(1)004A(2)	0.9	6.0	1.8
22.0	B	T491B226(1)004A(2)	0.9	6.0	3.5
#22.0	A	T491A226(1)004A(2)	0.9	6.0	4.0
#22.0	T	T491T226(1)004A(2)	0.9	6.0	5.0
22.0	S	T491S226(1)004A(2)	0.9	10.0	10.0
33.0	C	T491C336(1)004A(2)	1.3	6.0	1.8
33.0	U	T491U336(1)004A(2)	1.3	6.0	1.8
33.0	B	T491B336(1)004A(2)	1.3	6.0	3.5
#33.0	A	T491A336(1)004A(2)	1.3	6.0	4.0
#33.0	T	T491T336(1)004A(2)	1.3	8.0	5.0
47.0	C	T491C476(1)004A(2)	1.9	6.0	1.8
47.0	U	T491U476(1)004A(2)	1.9	6.0	1.8
#47.0	B	T491B476(1)004A(2)	1.9	6.0	3.0
#47.0	A	T491A476M004A(2)	1.9	12.0	2.5
#47.0	T	T491T476M004A(2)	1.9	12.0	6.0
68.0	D	T491D686(1)004A(2)	2.7	6.0	0.8
68.0	C	T491C686(1)004A(2)	2.7	6.0	1.6
#68.0	U	T491U686(1)004A(2)	2.7	6.0	1.8
#68.0	B	T491B686(1)004A(2)	2.7	6.0	3.5
#68.0	A	T491A686(1)004A(2)	2.8	30.0	4.0
100.0	D	T491D107(1)004A(2)	4.0	8.0	0.8
#100.0	C	T491C107(1)004A(2)	4.0	8.0	1.2
#100.0	U	T491U107(1)004A(2)	4.0	10.0	1.8
#100.0	B	T491B107M004A(2)	4.0	8.0	0.9
†100.0	A	T491A107M004A(2)	4.0	30.0	4.0
†100.0	T	T491T107M004A(2)	4.0	30.0	5.0
150.0	D	T491D157(1)004A(2)	6.0	8.0	0.8
150.0	V	T491V157(1)004A(2)	6.0	8.0	0.7
#150.0	C	T491C157(1)004A(2)	6.0	8.0	1.2
†150.0	B	T491B157M004A(2)	6.0	12.0	2.0
#220.0	V	T491V227(1)004A(2)	8.8	8.0	0.7
#220.0	B	T491B227M004A(2)	8.8	18.0	0.5
330.0	D	T491D337(1)004A(2)	13.2	8.0	0.7
†330.0	V	T491V337(1)004A(2)	13.2	12.0	0.7
#330.0	C	T491C337(1)004A(2)	13.2	10.0	0.9
#470.0	X	T491X477(1)004A(2)	18.8	8.0	0.5
#470.0	D	T491D477(1)004A(2)	18.8	8.0	0.8
#680.0	X	T491X687(1)004A(2)	27.2	12.0	0.5
#680.0	D	T491D687(1)004A(2)	27.2	12.0	0.5
#1000.0	X	T491X108(1)004A(2)	40.0	12.0	0.5
#1000.0	E	T491E108M004A(2)	40.0	15.0	0.2
****6.3 Volt Rating at +85ºC (4 Volt Rating at +125ºC)**					
2.2	R	T491R225(1)006A(2)	0.5	6.0	25.0
2.2	A	T491A225(1)006A(2)	0.5	6.0	8.0
3.3	A	T491A335(1)006A(2)	0.5	6.0	8.0
4.7	A	T491A475(1)006A(2)	0.5	6.0	6.0
4.7	S	T491S475(1)006A(2)	0.5	6.0	15.0
6.8	B	T491B685(1)006A(2)	0.5	6.0	3.5
6.8	A	T491A685(1)006A(2)	0.5	6.0	6.0
#6.8	S	T491S685(1)006A(2)	0.5	6.0	15.0
#6.8	R	T491R685(1)006A(2)	0.5	8.0	15.0
10.0	B	T491B106(1)006A(2)	0.6	6.0	3.5
10.0	A	T491A106(1)006A(2)	0.6	6.0	4.0
10.0	T	T491T106(1)006A(2)	0.6	6.0	5.0
#10.0	S	T491S106(1)006A(2)	0.6	10.0	15.0
#10.0	R	T491R106(1)006A(2)	0.6	8.0	10.0
****6.3 Volt Rating at +85ºC (4 Volt Rating at +125ºC)**					
15.0	C	T491C156(1)006A(2)	0.9	6.0	1.8
15.0	B	T491B156(1)006A(2)	0.9	6.0	3.5
#15.0	A	T491A156(1)006A(2)	0.9	6.0	3.5
#15.0	T	T491T156(1)006A(2)	0.9	6.0	5.0
#15.0	S	T491S156(1)006A(2)	0.9	15.0	10.0
22.0	C	T491C226(1)006A(2)	1.4	6.0	1.8
22.0	U	T491U226(1)006A(2)	1.4	6.0	1.8
22.0	B	T491B226(1)006A(2)	1.4	6.0	3.5
#22.0	A	T491A226(1)006A(2)	1.4	6.0	4.0
#22.0	T	T491T226(1)006A(2)	1.4	8.0	5.0
33.0	C	T491C336(1)006A(2)	2.0	6.0	1.8
33.0	U	T491U336(1)006A(2)	2.0	6.0	1.8
#33.0	B	T491B336(1)006A(2)	2.0	6.0	3.0
#33.0	A	T491A336(1)006A(2)	2.0	12.0	2.5
#33.0	T	T491T336(1)006A(2)	2.0	12.0	6.0
47.0	D	T491D476(1)006A(2)	2.9	6.0	0.8
47.0	C	T491C476(1)006A(2)	2.9	6.0	1.6
#47.0	U	T491U476(1)006A(2)	2.9	6.0	1.8
#47.0	B	T491B476(1)006A(2)	2.9	6.0	2.0
†47.0	A	T491A476M006A(2)	3.0	12.0	3.5
*47.0	T	T491T476(1)006A(2)	3.0	24.0	4.4
68.0	D	T491D686(1)006A(2)	4.1	6.0	0.8
#68.0	C	T491C686(1)006A(2)	4.1	6.0	1.2
#68.0	U	T491U686(1)006A(2)	4.1	10.0	1.8
#68.0	B	T491B686(1)006A(2)	4.1	8.0	0.9
#68.0	A	T491A686(1)006A(2)	5.0	30.0	4.0
100.0	D	T491D107(1)006A(2)	6.0	8.0	0.8
100.0	V	T491V107(1)006A(2)	6.0	8.0	0.7
#100.0	C	T491C107(1)006A(2)	6.0	8.0	0.9
#100.0	U	T491U107(1)006A(2)	6.0	10.0	1.8
#100.0	B	T491B107(1)006A(2)	6.3	15.0	3.0
150.0	D	T491D157(1)006A(2)	9.0	8.0	0.7
#150.0	C	T491C157(1)006A(2)	9.0	8.0	1.2
#150.0	V	T491V157(1)006A(2)	9.0	8.0	0.7
220.0	X	T491X227(1)006A(2)	13.2	8.0	0.7
#220.0	D	T491D227(1)006A(2)	13.2	8.0	0.7
#220.0	C	T491C227M006A(2)	13.2	10.0	1.2
#220.0	V	T491V227(1)006A(2)	13.2	12.0	0.7
330.0	X	T491X337(1)006A(2)	19.8	8.0	0.4
330.0	D	T491D337(1)006A(2)	19.8	8.0	0.4
330.0	E	T491E337(1)006A(2)	20.8	8.0	0.5
470.0	X	T491X477(1)006A(2)	28.2	10.0	0.4
470.0	D	T491D477M006A(2)	28.2	12.0	0.4
470.0	E	T491E477(1)006A(2)	29.6	10.0	0.4
680.0	E	T491E687M006A(2)	40.8	12.0	0.5
10 Volt Rating at +85ºC (7 Volt Rating at +125ºC)					
1.5	A	T491A155(1)010A(2)	0.5	6.0	8.0
2.2	B	T491B225(1)010A(2)	0.5	6.0	3.5
2.2	A	T491A225(1)010A(2)	0.5	6.0	8.0
3.3	A	T491A335(1)010A(2)	0.5	6.0	6.0
3.3	S	T491S335(1)010A(2)	0.5	6.0	15.0
#3.3	R	T491R335(1)010A(2)	0.3	8.0	15.0
4.7	B	T491B475(1)010A(2)	0.5	6.0	3.5
4.7	A	T491A475(1)010A(2)	0.5	6.0	5.0
#4.7	S	T491S475(1)010A(2)	0.5	6.0	15.0
#4.7	R	T491R475(1)010A(2)	0.5	8.0	10.0
6.8	B	T491B685(1)010A(2)	0.7	6.0	3.5
6.8	A	T491A685(1)010A(2)	0.7	6.0	4.0
6.8	T	T491T685(1)010A(2)	0.7	6.0	5.0
#6.8	S	T491S685(1)010A(2)	0.7	10.0	15.0
10.0	C	T491C106(1)010A(2)	1.0	6.0	1.8
10.0	B	T491B106(1)010A(2)	1.0	6.0	3.5
#10.0	A	T491A106(1)010A(2)	1.0	6.0	4.0
#10.0	T	T491T106(1)010A(2)	1.0	6.0	5.0
#10.0	S	T491S106(1)010A(2)	1.0	10.0	15.0
15.0	C	T491C156(1)010A(2)	1.5	6.0	1.8
15.0	U	T491U156(1)010A(2)	1.5	6.0	1.8
15.0	B	T491B156(1)010A(2)	1.5	6.0	2.8
#15.0	A	T491A156(1)010A(2)	1.5	8.0	6.0
#15.0	T	T491T156(1)010A(2)	1.5	8.0	5.0

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.
(2) To complete KEMET Part Number, insert T, H, G lead material designation as shown on page 15.
*Extended Values
**6 Volt product equivalent to 6.3 volt product.
#Maximum Capacitance Change @ 125ºC=+15%.
†Maximum Capacitance Change @ 125ºC=+20%.
Higher voltage ratings and tighter tolerance product may be substituted within the same size at KEMET's option.
Voltage substitutions will be marked with the higher voltage rating.

SOLID TANTALUM CHIP CAPACITORS

T491 SERIES—Precision Molded Chip

KEMET CHARGED.

T491 RATINGS & PART NUMBER REFERENCE

Capacitance µF	Case Size	KEMET Part Number	DC Leakage µA @ 25ºC Max	DF % @ +25ºC 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
10 Volt Rating at +85ºC (7 Volt Rating at +125ºC)					
22.0	C	T491C226(1)010A(2)	2.2	6.0	1.8
22.0	U	T491U226(1)010A(2)	2.2	6.0	1.8
#22.0	B	T491B226(1)010A(2)	2.2	6.0	2.4
#22.0	A	T491A226M010A(2)	2.2	10.0	6.0
#22.0	T	T491T226(1)010A(2)	2.2	12.0	8.0
33.0	D	T491D336(1)010A(2)	3.3	6.0	0.8
33.0	V	T491V336(1)010A(2)	3.3	6.0	0.7
33.0	C	T491C336(1)010A(2)	3.3	6.0	1.6
#33.0	U	T491U336(1)010A(2)	3.3	6.0	1.8
#33.0	B	T491B336(1)010A(2)	3.3	6.0	1.8
	T	T491T336(1)010A(2)	3.3	24.0	5.0
#33.0	A	T491A336(1)010A(2)	3.3	15.0	6.0
47.0	D	T491D476(1)010A(2)	4.7	6.0	0.8
47.0	V	T491V476(1)010A(2)	4.7	6.0	0.7
#47.0	C	T491C476(1)010A(2)	4.7	6.0	1.2
#47.0	U	T491U476(1)010A(2)	4.7	10.0	2.2
#47.0	B	T491B476(1)010A(2)	4.7	8.0	1.0
68.0	D	T491D686(1)010A(2)	6.8	6.0	0.8
68.0	V	T491V686(1)010A(2)	6.8	6.0	0.7
#68.0	C	T491C686(1)010A(2)	6.8	6.0	1.2
#68.0	U	T491U686(1)010A(2)	6.8	10.0	1.8
#68.0	B	T491B686M010A(2)	6.8	10.0	3.0
100.0	D	T491D107(1)010A(2)	10.0	8.0	0.7
#100.0	C	T491C107(1)010A(2)	10.0	8.0	1.2
#100.0	V	T491V107(1)010A(2)	10.0	8.0	0.7
150.0	X	T491X157(1)010A(2)	15.0	8.0	0.7
#150.0	D	T491D157(1)010A(2)	15.0	8.0	0.7
#150.0	C	T491C157(1)010A(2)	15.0	10.0	0.9
#150.0	V	T491V157(1)010A(2)	15.0	8.0	0.7
#220.0	X	T491X227(1)010A(2)	22.0	8.0	0.5
#220.0	D	T491D227(1)010A(2)	22.0	8.0	0.5
#220.0	V	T491V227(1)010A(2)	22.0	12.0	0.7
#330.0	D	T491D337M010A(2)	33.0	10.0	0.5
#330.0	X	T491X337(1)010A(2)	33.0	10.0	0.5
#330.0	E	T491E337(1)010A(2)	33.0	10.0	0.5
#470.0	X	T491X477M010A(2)	47.0	10.0	0.2
#470.0	E	T491E477M010A(2)	47.0	12.0	0.5
16 Volt Rating at +85ºC (10 Volt Rating at +125ºC)					
1.0	A	T491A105(1)016A(2)	0.5	4.0	10.0
1.5	A	T491A155(1)016A(2)	0.5	6.0	8.0
2.2	A	T491A225(1)016A(2)	0.5	6.0	6.0
2.2	S	T491S225(1)016A(2)	0.5	6.0	15.0
#2.2	R	T491R225(1)016A(2)	0.5	8.0	25.0
3.3	B	T491B335(1)016A(2)	0.5	6.0	3.5
3.3	A	T491A335(1)016A(2)	0.5	6.0	5.0
4.7	C	T491C475(1)016A(2)	0.75	6.0	2.4
4.7	B	T491B475(1)016A(2)	0.8	6.0	3.5
4.7	A	T491A475(1)016A(2)	0.8	6.0	4.0
4.7	T	T491T475(1)016A(2)	0.8	6.0	5.0
6.8	C	T491C685(1)016A(2)	1.1	6.0	1.9
6.8	B	T491B685(1)016A(2)	1.1	6.0	2.5
#6.8	A	T491A685(1)016A(2)	1.1	6.0	3.5
10.0	C	T491C106(1)016A(2)	1.6	6.0	1.8
10.0	U	T491U106(1)016A(2)	1.6	6.0	1.8
10.0	B	T491B106(1)016A(2)	1.6	6.0	2.8
#10.0	A	T491A106(1)016A(2)	1.6	8.0	7.0
#10.0	T	T491T106(1)016A(2)	1.6	8.0	8.0
15.0	C	T491C156(1)016A(2)	2.4	6.0	1.8
15.0	U	T491U156(1)016A(2)	2.4	6.0	1.8
15.0	B	T491B156(1)016A(2)	2.4	6.0	2.5
#15.0	A	T491A156(1)016A(2)	2.4	8.0	3.5
22.0	D	T491D226(1)016A(2)	3.6	6.0	0.8
22.0	C	T491C226(1)016A(2)	3.6	6.0	1.6
#22.0	U	T491U226(1)016A(2)	3.6	10.0	3.0
#22.0	B	T491B226(1)016A(2)	3.6	6.0	2.2
33.0	D	T491D336(1)016A(2)	5.3	6.0	0.8
#33.0	C	T491C336(1)016A(2)	5.3	6.0	1.2
#33.0	U	T491U336(1)016A(2)	5.3	12.0	3.0
47.0	D	T491D476(1)016A(2)	7.5	6.0	0.8
47.0	V	T491V476(1)016A(2)	7.5	6.0	0.7
#47.0	C	T491C476(1)016A(2)	7.5	6.0	1.2
68.0	V	T491V686(1)016A(2)	10.9	6.0	0.7
68.0	D	T491D686(1)016A(2)	10.9	6.0	0.7
68.0	C	T491C686(1)016A(2)	10.9	12.0	1.2

Capacitance µF	Case Size	KEMET Part Number	DC Leakage µA @ 25ºC Max	DF % @ +25ºC 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
16 Volt Rating at +85ºC (10 Volt Rating at +125ºC)					
100.0	X	T491X107(1)016A(2)	16.0	8.0	0.7
†100.0	V	T491V107(1)016A(2)	16.0	12.0	0.7
#100.0	D	T491D107(1)016A(2)	16.0	8.0	0.7
#150.0	X	T491X157(1)016A(2)	24.0	8.0	0.5
#150.0	D	T491D157(1)016A(2)	24.0	12.0	0.7
#220.0	X	T491X227(1)016A(2)	35.2	10.0	0.5
#220.0	E	T491E227(1)016A(2)	35.2	7.2	0.9
20 Volt Rating at +85ºC (13 Volt Rating at + 125ºC)					
0.47	R	T491R474(1)020A(2)	0.1	4.0	35.0
0.68	A	T491A684(1)020A(2)	0.5	4.0	12.0
1.0	A	T491A105(1)020A(2)	0.5	4.0	9.0
1.0	S	T491S105(1)020A(2)	0.5	6.0	18.0
#1.0	R	T491R105(1)020A(2)	0.5	6.0	20.0
1.5	A	T491A155(1)020A(2)	0.5	6.0	6.5
1.5	S	T491S155(1)020A(2)	0.5	6.0	15.0
2.2	B	T491B225(1)020A(2)	0.5	6.0	3.5
2.2	A	T491A225(1)020A(2)	0.5	0.6	7.0
2.2	R	T491R225(1)020A(2)	0.4	8.0	8.0
3.3	B	T491B335(1)020A(2)	0.7	6.0	3.0
#3.3	A	T491A335(1)020A(2)	0.7	6.0	4.5
3.3	T	T491T335(1)020A(2)	0.7	6.0	5.0
4.7	C	T491C475(1)020A(2)	1.0	6.0	2.4
4.7	B	T491B475(1)020A(2)	1.0	6.0	3.0
#4.7	A	T491A475(1)020A(2)	1.0	6.0	4.0
6.8	C	T491C685(1)020A(2)	1.4	6.0	1.9
6.8	U	T491U685(1)020A(2)	1.4	6.0	1.9
#6.8	B	T491B685(1)020A(2)	1.4	6.0	2.5
#6.8	A	T491A685M020A(2)	1.4	8.0	6.0
10.0	C	T491C106(1)020A(2)	2.0	6.0	1.8
10.0	U	T491U106(1)020A(2)	2.0	6.0	1.8
#10.0	B	T491B106(1)020A(2)	2.0	6.0	2.1
#10.0	A	T491A106M020A(2)	2.0	10.0	5.0
15.0	D	T491D156(1)020A(2)	3.0	6.0	1.0
15.0	C	T491C156(1)020A(2)	3.0	6.0	1.7
22.0	D	T491D226(1)020A(2)	4.4	6.0	0.8
22.0	V	T491V226(1)020A(2)	4.4	6.0	0.7
#22.0	C	T491C226(1)020A(2)	4.4	6.0	1.2
#22.0	B	T491B226(1)020A(2)	4.4	8.0	4.0
33.0	D	T491D336(1)020A(2)	6.6	6.0	0.8
#33.0	C	T491C336M020A(2)	6.6	6.0	1.2
†33.0	V	T491V336(1)020A(2)	6.6	8.0	0.7
47.0	C	T491C476M020A(2)	9.4	10.0	0.9
47.0	D	T491D476(1)020A(2)	9.4	6.0	0.7
68.0	X	T491X686(1)020A(2)	13.6	6.0	0.7
#68.0	D	T491D686(1)020A(2)	13.6	8.0	0.7
#100.0	X	T491X107(1)020A(2)	20.0	8.0	0.5
#100.0	E	T491E107(1)020A(2)	20.0	8.0	0.5
#150.0	X	T491X157(1)020A(2)	30.0	10.0	0.5
25 Volt Rating at +85ºC (17 Volt Rating at +125ºC)					
0.33	A	T491A334(1)025A(2)	0.5	4.0	15.0
0.47	A	T491A474(1)025A(2)	0.5	4.0	14.0
0.68	A	T491A684(1)025A(2)	0.5	4.0	10.0
1.0	B	T491B105(1)025A(2)	0.5	4.0	5.0
1.0	A	T491A105(1)025A(2)	0.5	4.0	8.0
1.0	S	T491S105(1)025A(2)	0.25	6.0	0.18
1.5	B	T491B155(1)025A(2)	0.5	6.0	5.0
1.5	A	T491A155(1)025A(2)	0.5	6.0	7.5
1.5	R	T491R155(1)025A(2)	0.4	8.0	8.0
2.2	C	T491C225(1)025A(2)	0.6	6.0	3.5
2.2	B	T491B225(1)025A(2)	0.6	6.0	4.5
3.3	C	T491C335(1)025A(2)	0.9	6.0	2.5
3.3	B	T491B335(1)025A(2)	0.9	6.0	3.5
4.7	C	T491C475(1)025A(2)	1.2	6.0	2.4
#4.7	B	T491B475(1)025A(2)	1.2	6.0	1.5
#4.7	A	T491A475M025A(2)	1.2	8.0	6.0
6.8	C	T491C685(1)025A(2)	1.7	6.0	1.9
6.8	B	T491B685(1)025A(2)	1.7	8.0	2.8
10.0	D	T491D106(1)025A(2)	2.5	6.0	1.0
10.0	C	T491C106(1)025A(2)	2.5	6.0	1.5
10.0	B	T491B106(1)025A(2)	2.5	8.0	3.0
15.0	D	T491D156(1)025A(2)	3.8	6.0	1.0
#15.0	C	T491C156(1)025A(2)	3.8	6.0	1.5
#15.0	B	T491B156(1)025A(2)	3.8	8.0	4.0
22.0	D	T491D226(1)025A(2)	5.5	6.0	0.8
22.0	C	T491C226(1)025A(2)	5.5	6.0	1.4
22.0	V	T491V226(1)025A(2)	5.5	6.0	0.7
33.0	X	T491X336(1)025A(2)	8.3	6.0	0.7
#33.0	D	T491D336(1)025A(2)	8.3	6.0	0.7
#33.0	C	T491C336(1)025A(2)	8.3	10.0	1.2
#47.0	X	T491X476(1)025A(2)	11.8	6.0	0.7
†47.0	D	T491D476(1)025A(2)	11.8	10.0	0.7
†68.0	X	T491X686M025A(2)	17.0	8.0	0.7
†68.0	D	T491D686M025A(2)	17.0	10.0	0.7
100.0	X	T491X107(1)025A(2)	25.0	8.0	0.3

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.
(2) To complete KEMET Part Number, insert T, H, G lead material designation as shown on page 15.
*Extended Values
**6 Volt product equivalent to 6.3 volt product.
#Maximum Capacitance Change @ 125ºC=+15%.
†Maximum Capacitance Change @ 125ºC=+20%.

Higher voltage ratings and tighter tolerance product may be substituted within the same size at KEMET's option. Voltage substitutions will be marked with the higher voltage rating.

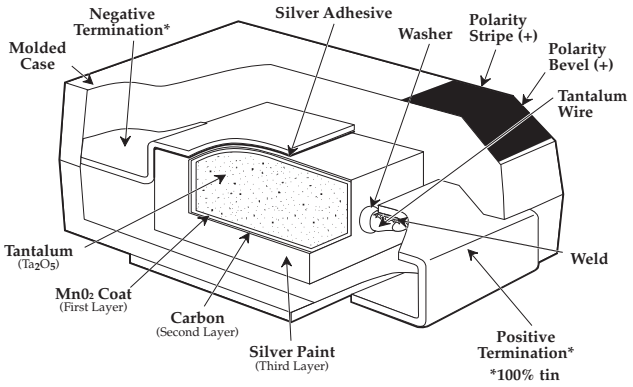
SOLID TANTALUM CHIP CAPACITORS

T491 SERIES—Precision Molded Chip

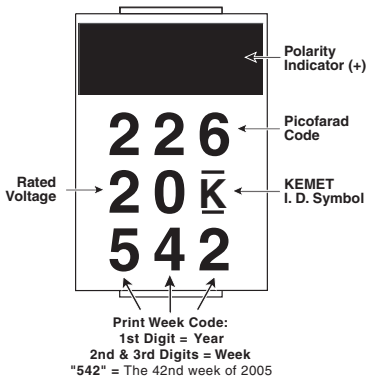
T491 RATINGS & PART NUMBER REFERENCE

Capacitance µF	Case Size	KEMET Part Number	DC Leakage µA @ 25ºC Max	DF % @ +25ºC 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
35 Volt Rating at +85ºC (23 Volt Rating at +125ºC)					
0.10	A	T491A104(1)035A(2)	0.5	4.0	20.0
0.15	A	T491A154(1)035A(2)	0.5	4.0	19.0
0.22	A	T491A224(1)035A(2)	0.5	4.0	18.0
0.33	A	T491A334(1)035A(2)	0.5	4.0	15.0
0.47	B	T491B474(1)035A(2)	0.5	4.0	8.0
0.47	A	T491A474(1)035A(2)	0.5	4.0	12.0
0.68	B	T491B684(1)035A(2)	0.5	4.0	6.5
0.68	A	T491A684(1)035A(2)	0.5	4.0	8.0
1.0	B	T491B105(1)035A(2)	0.5	4.0	5.0
1.0	A	T491A105(1)035A(2)	0.5	4.0	7.5
1.5	C	T491C155(1)035A(2)	0.5	6.0	4.5
1.5	B	T491B155(1)035A(2)	0.5	6.0	5.0
2.2	C	T491C225(1)035A(2)	0.8	6.0	3.5
2.2	B	T491B225(1)035A(2)	0.8	6.0	4.0
3.3	C	T491C335(1)035A(2)	1.2	6.0	2.5
#3.3	B	T491B335(1)035A(2)	1.2	6.0	3.5
4.7	D	T491D475(1)035A(2)	1.7	6.0	1.5
4.7	C	T491C475(1)035A(2)	1.7	6.0	2.2
6.8	D	T491D685(1)035A(2)	2.4	6.0	1.3
6.8	C	T491C685(1)035A(2)	2.4	6.0	1.8
10.0	D	T491D106(1)035A(2)	3.5	6.0	1.0
#10.0	C	T491C106M035A(2)	3.5	6.0	1.6
#10.0	V	T491V106(1)035A(2)	3.5	6.0	2.0
15.0	X	T491X156(1)035A(2)	5.3	6.0	0.9
15.0	D	T491D156(1)035A(2)	5.3	6.0	0.8
22.0	X	T491X226(1)035A(2)	7.7	6.0	0.7
#22.0	D	T491D226(1)035A(2)	7.7	6.0	0.7
#33.0	X	T491X336(1)035A(2)	11.6	6.0	0.6
†47.0	X	T491X476(1)035A(2)	16.5	8.0	0.6
#47.0	E	T491E476(1)035A(2)	16.5	10.0	0.5
50 Volt Rating at +85ºC (33 Volt Rating at + 125ºC)					
0.10	A	T491A104(1)050A(2)	0.5	4.0	20.0
0.15	B	T491B154(1)050A(2)	0.5	4.0	16.0
0.15	A	T491A154(1)050A(2)	0.5	4.0	15.0
0.22	B	T491B224(1)050A(2)	0.5	4.0	14.0
0.33	B	T491B334(1)050A(2)	0.5	4.0	10.0
0.47	C	T491C474(1)050A(2)	0.5	4.0	8.0
0.47	B	T491B474(1)050A(2)	0.5	4.0	9.0
0.68	C	T491C684(1)050A(2)	0.5	4.0	7.0
0.68	B	T491B684(1)050A(2)	0.5	4.0	8.0
1.0	C	T491C105(1)050A(2)	0.5	4.0	5.5
1.0	B	T491B105(1)050A(2)	0.5	6.0	6.0
1.0	V	T491V105(1)050A(2)	0.5	4.0	6.0
1.5	D	T491D155(1)050A(2)	0.8	6.0	3.5
1.5	C	T491C155(1)050A(2)	0.8	6.0	4.5
2.2	D	T491D225(1)050A(2)	1.1	6.0	2.5
2.2	C	T491C225(1)050A(2)	1.1	6.0	3.0
3.3	D	T491D335(1)050A(2)	1.7	6.0	2.0
4.7	D	T491D475(1)050A(2)	2.4	6.0	1.4
6.8	X	T491X685(1)050A(2)	3.5	6.0	1.0
#6.8	D	T491D685(1)050A(2)	3.4	6.0	1.0
#10.0	X	T491X106M050A(2)	5.0	6.0	0.7
#10.0	D	T491D106(1)050A(2)	5.0	6.0	0.8
†15.0	X	T491X156(1)050A(2)	7.5	8.0	0.7
22.0	X	T491X226(1)050A(2)	11.0	10.0	0.6

CONSTRUCTION



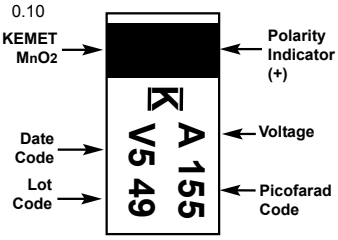
CAPACITOR MARKINGS



(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.
(2) To complete KEMET Part Number, insert T, H, G lead material designation as shown on page 15.
*Extended Values
**6 Volt product equivalent to 6.3 volt product.
#Maximum Capacitance Change @ 125ºC=+15%.
†Maximum Capacitance Change @ 125ºC=+20%.
Higher voltage ratings and tighter tolerance product may be substituted within the same size at KEMET's option.
Voltage substitutions will be marked with the higher voltage rating.

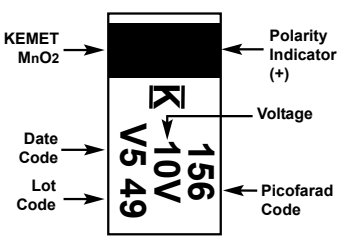
CAPACITOR ALTERNATE MARKINGS

A Case Size

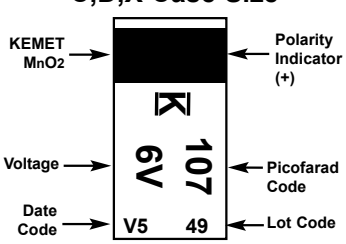


A Case Size Voltage Code	
G	4
J	6.3
A	10
C	16
D	20
E	25
V	35
T	50

B Case Size



C,D,X Case Size



Date Code - Year		Date Code - Month			
S = 2004	V = 2007	1 = January	4 = April	7 = July	10 = October
T = 2005	W = 2008	2 = February	5 = May	8 = August	11 = November
U = 2006	X = 2009	3 = March	6 = June	9 = September	12 = December