

TANTALUM CHIP CAPACITORS

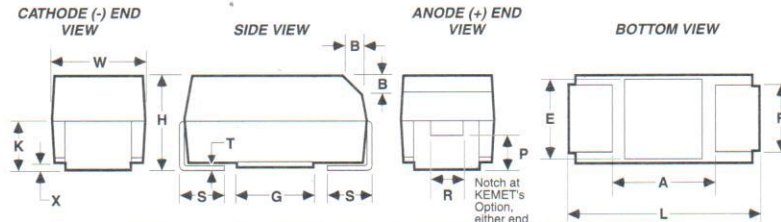
T494 SERIES — Low ESR, Industrial Grade

KEMET

FEATURES

- Low ESR values in EIA 535BAAC sizes
- Taped and Reeled per EIA 481-1
- Symmetrical, Compliant Terminations
- Optional Gold-plated Terminations
- Laser-marked Case
- 100% Surge Current test on C, D, U, V, X sizes
- Capacitance: 0.1 μ F to 470 μ F
- Tolerance: $\pm 10\%$, $\pm 20\%$
- Voltage: 4-50 VDC
- Extended Range Values
- New Low Profile Case Sizes

CAPACITOR OUTLINE DRAWING



STANDARD T494 DIMENSIONS

Millimeters (inches)

CASE SIZE		COMPONENT													
KEMET	EIA/IECQ	L*	W*	H*	K* ± 0.20 $\pm (.008)$	F* ± 0.1 $\pm (.004)$	S* ± 0.3 $\pm (.012)$	B ± 0.15 $(\text{Ref}) \pm (.006)$	X (Ref)	P (Ref)	R (Ref)	T (Ref)	A (Min)	G (Ref)	E (Ref)
A	3216	3.2 ± 0.2 $(.126 \pm .008)$	1.6 ± 0.2 $(.063 \pm .008)$	1.6 ± 0.2 $(.063 \pm .008)$	0.9 (.035)	1.2 (.047)	0.8 (.031)	0.4 (.016)	0.10 ± 0.10 $(.004 \pm .004)$	0.4 (.016)	0.4 (.016)	0.13 (.005)	0.8 (.031)	1.1 (.043)	1.3 (.051)
B	3528	3.5 ± 0.2 $(.138 \pm .008)$	2.8 ± 0.2 $(.110 \pm .008)$	1.9 ± 0.2 $(.075 \pm .008)$	1.1 (.043)	2.2 (.087)	0.8 (.031)	0.4 (.016)	0.10 ± 0.10 $(.004 \pm .004)$	0.5 (.020)	1.0 (.039)	0.13 (.005)	1.1 (.043)	1.8 (.071)	2.2 (.087)
C	6032	6.0 ± 0.3 $(.236 \pm .012)$	3.2 ± 0.3 $(.126 \pm .012)$	2.5 ± 0.3 $(.098 \pm .012)$	1.4 (.055)	2.2 (.087)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 $(.004 \pm .004)$	0.9 (.035)	1.0 (.039)	0.13 (.005)	2.5 (.098)	2.8 (.110)	2.4 (.094)
D	7343	7.3 ± 0.3 $(.287 \pm .012)$	4.3 ± 0.3 $(.169 \pm .012)$	2.8 ± 0.3 $(.110 \pm .012)$	1.5 (.059)	2.4 (.094)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 $(.004 \pm .004)$	0.9 (.035)	1.0 (.039)	0.13 (.005)	3.8 (.150)	3.5 (.138)	3.5 (.138)
X	7343H	7.3 ± 0.3 $(.287 \pm .012)$	4.3 ± 0.3 $(.169 \pm .012)$	4.0 ± 0.3 $(.157 \pm .012)$	2.3 (.091)	2.4 (.094)	1.3 (.051)	0.5 (.020)	0.10 ± 0.10 $(.004 \pm .004)$	1.7 (.067)	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-C-55365/8 Specified Dimensions
 ** Round Glue Pad: 2.9 ± 0.1 mm ($0.114'' \pm 0.004''$) in diameter at KEMET's option

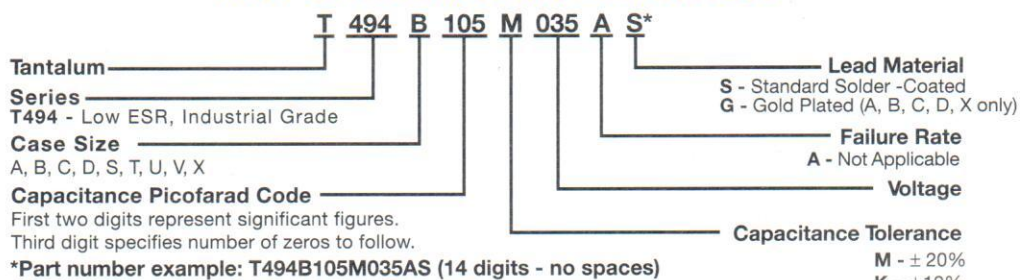
LOW PROFILE T494 DIMENSIONS

Millimeters (inches)

CASE SIZE		COMPONENT										
KEMET	EIA/IECQ	L	W	H Max.	K Min.	F ± 0.1	S ± 0.3	X (Ref)	T (Ref)	A (Min)	G (Ref)	E (Ref)
S	3216L	3.2 ± 0.2 $(.126 \pm .008)$	1.6 ± 0.2 $(.063 \pm .008)$	1.2 (.047)	0.3 (.012)	1.2 (.047)	0.8 (.031)	0.05 (.002)	0.13 (.005)	0.8 (.031)	1.1 (.043)	1.3 (.051)
T	3528L	3.5 ± 0.2 $(.138 \pm .008)$	2.8 ± 0.2 $(.110 \pm .008)$	1.2 (.047)	0.3 (.012)	2.2 (.087)	0.8 (.031)	0.05 (.002)	0.13 (.005)	1.1 (.043)	1.8 (.071)	2.2 (.087)
U	6032L	6.0 ± 0.3 $(.236 \pm .012)$	3.2 ± 0.3 $(.126 \pm .012)$	1.5 (.059)	0.5 (.020)	2.2 (.087)	1.3 (.051)	0.05 (.002)	0.13 (.005)	2.5 (.098)	2.8 (.110)	2.4 (.094)
V	7343L	7.3 ± 0.3 $(.287 \pm .012)$	4.3 ± 0.3 $(.169 \pm .012)$	2.0 (.079)	1.1 (.043)	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.

T494 ORDERING INFORMATION



T494 RATINGS & PART NUMBER REFERENCE

Capacitance μF	Case Size	KEMET Part Number	DC Leakage μA @ 25°C Max	DF % @ +25°C 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
3 Volt Rating at +85°C (2 Volt Rating at +125°C)					
#33.0	*A	T494A336(1)003AS	1.0	6.0	2.0
4 Volt Rating at +85°C (2.7 Volt Rating at +125°C)					
3.3	A	T494A335(1)004AS	0.5	6.0	4.0
4.7	A	T494A475(1)004AS	0.5	6.0	3.5
6.8	A	T494A685(1)004AS	0.5	6.0	3.0
#6.8	*S	T494S685(1)004AS	0.5	6.0	7.0
10.0	B	T494B106(1)004AS	0.5	6.0	1.2
10.0	A	T494A106(1)004AS	0.5	6.0	2.0
#10.0	*S	T494S106(1)004AS	0.5	6.0	9.0
15.0	B	T494B156(1)004AS	0.6	6.0	1.2
#15.0	*A	T494A156(1)004AS	0.6	6.0	1.5
#15.0	*T	T494T156(1)004AS	0.6	6.0	2.0
22.0	C	T494C226(1)004AS	0.9	6.0	0.5
22.0	B	T494B226(1)004AS	0.9	6.0	0.6
#22.0	*A	T494A226(1)004AS	0.9	6.0	1.5
#22.0	*T	T494T226(1)004AS	0.9	6.0	2.5
33.0	C	T494C336(1)004AS	1.3	6.0	0.5
#33.0	*B	T494B336(1)004AS	1.3	6.0	0.5
#33.0	*A	T494A336(1)004AS	1.3	6.0	3.0
#33.0	*U	T494U336(1)004AS	1.3	6.0	0.6
47.0	C	T494C476(1)004AS	1.9	6.0	0.5
#47.0	*B	T494B476(1)004AS	1.9	6.0	0.5
#47.0	*U	T494U476(1)004AS	1.9	6.0	0.6
68.0	D	T494D686(1)004AS	2.7	6.0	0.20
68.0	*C	T494C686(1)004AS	2.7	6.0	0.25
#68.0	*B	T494B686(1)004AS	2.7	6.0	2.0
#68.0	*U	T494U686(1)004AS	2.7	6.0	0.60
100.0	D	T494D107(1)004AS	4.0	8.0	0.20
#100.0	*C	T494C107(1)004AS	4.0	8.0	0.20
150.0	D	T494D157(1)004AS	6.0	8.0	0.15
#150.0	*V	T494V157(1)004AS	6.0	8.0	0.20
#150.0	*C	T494C157(1)004AS	6.0	8.0	0.30
#220.0	*V	T494V227(1)004AS	8.8	8.0	0.30
#330.0	*D	T494D337(1)004AS	13.2	8.0	0.15
#470.0	*X	T494X477(1)004AS	18.8	8.0	0.15
#470.0	*D	T494D477(1)004AS	18.8	8.0	0.15
**6 Volt Rating at +85°C (4 Volt Rating at +125°C)					
2.2	A	T494A225(1)006AS	0.5	6.0	6.0
3.3	A	T494A335(1)006AS	0.5	6.0	6.0
4.7	A	T494A475(1)006AS	0.5	6.0	3.5
#4.7	*S	T494S475(1)006AS	0.5	6.0	8.0
6.8	B	T494B685(1)006AS	0.5	6.0	1.2
6.8	A	T494A685(1)006AS	0.5	6.0	2.0
#6.8	*S	T494S685(1)006AS	0.5	6.0	9.0
10.0	B	T494B106(1)006AS	0.6	6.0	1.0
#10.0	*A	T494A106(1)006AS	0.6	6.0	2.0
#10.0	*T	T494T106(1)006AS	0.6	6.0	1.2
15.0	C	T494C156(1)006AS	0.9	6.0	0.6
15.0	B	T494B156(1)006AS	0.9	6.0	0.7
#15.0	*A	T494A156(1)006AS	0.9	6.0	2.0
#15.0	*T	T494T156(1)006AS	0.9	6.0	2.5
22.0	C	T494C226(1)006AS	1.4	6.0	0.5
#22.0	*B	T494B226(1)006AS	1.4	6.0	0.6
#22.0	*A	T494A226(1)006AS	1.4	6.0	3.0
#22.0	*U	T494U226(1)006AS	1.4	6.0	0.8
33.0	C	T494C336(1)006AS	2.0	6.0	0.3
#33.0	*B	T494B336(1)006AS	2.0	6.0	0.6
#33.0	*U	T494U336(1)006AS	2.0	6.0	0.6
47.0	D	T494D476(1)006AS	2.9	6.0	0.22
47.0	*C	T494C476(1)006AS	2.9	6.0	0.25
#47.0	*B	T494B476(1)006AS	2.9	6.0	2.0
#47.0	*U	T494U476(1)006AS	2.9	6.0	0.60
68.0	D	T494D686(1)006AS	4.1	6.0	0.20
#68.0	*C	T494C686(1)006AS	4.1	6.0	0.20
100.0	D	T494D107(1)006AS	6.0	8.0	0.15
#100.0	*V	T494V107(1)006AS	6.0	8.0	0.20
#100.0	*C	T494C107(1)006AS	6.0	8.0	0.30
150.0	*D	T494D157(1)006AS	9.0	8.0	0.15
#150.0	*V	T494V157(1)006AS	9.0	8.0	0.30

Capacitance μF	Case Size	KEMET Part Number	DC Leakage μA @ 25°C Max	DF % @ +25°C 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
**6 Volt Rating at +85°C (4 Volt Rating at +125°C) cont'd.					
220.0	*X	T494X227(1)006AS	13.2	8.0	0.15
#220.0	*D	T494D227(1)006AS	13.2	8.0	0.15
#330.0	*X	T494X337(1)006AS	19.8	8.0	0.15
#330.0	*D	T494D337(1)006AS	19.8	8.0	0.15
#470.0	*X	T494X477(1)006AS	28.2	10.0	0.10
10 Volt Rating at +85°C (7 Volt Rating at +125°C)					
1.5	A	T494A155(1)010AS	0.5	6.0	6.0
2.2	A	T494A225(1)010AS	0.5	6.0	6.0
3.3	A	T494A335(1)010AS	0.5	6.0	4.0
#3.3	*S	T494S335(1)010AS	0.5	6.0	9.0
4.7	B	T494B475(1)010AS	0.5	6.0	1.5
4.7	A	T494A475(1)010AS	0.5	6.0	3.0
#4.7	*S	T494S475(1)010AS	0.5	6.0	9.0
6.8	B	T494B685(1)010AS	0.7	6.0	1.2
#6.8	*A	T494A685(1)010AS	0.7	6.0	3.0
#6.8	*T	T494T685(1)010AS	0.7	6.0	2.0
10.0	C	T494C106(1)010AS	1.0	6.0	0.6
10.0	*B	T494B106(1)010AS	1.0	6.0	0.8
#10.0	*A	T494A106(1)010AS	1.0	6.0	2.0
#10.0	*T	T494T106(1)010AS	1.0	6.0	3.5
15.0	C	T494C156(1)010AS	1.5	6.0	0.5
#15.0	*B	T494B156(1)010AS	1.5	6.0	0.7
#15.0	*U	T494U156(1)010AS	1.5	6.0	0.8
22.0	C	T494C226(1)010AS	2.2	6.0	0.4
#22.0	*B	T494B226(1)010AS	2.2	6.0	0.7
#22.0	*U	T494U226(1)010AS	2.2	6.0	0.8
33.0	D	T494D336(1)010AS	3.3	6.0	0.25
33.0	*C	T494C336(1)010AS	3.3	6.0	0.30
#33.0	*B	T494B336(1)010AS	3.3	6.0	2.0
#33.0	*U	T494U336(1)010AS	3.3	6.0	0.60
#33.0	*V	T494V336(1)010AS	3.3	6.0	0.30
47.0	D	T494D476(1)010AS	4.7	6.0	0.22
#47.0	*C	T494C476(1)010AS	4.7	6.0	0.30
#47.0	*V	T494V476(1)010AS	4.7	6.0	0.30
68.0	D	T494D686(1)010AS	6.8	6.0	0.20
#68.0	*C	T494C686(1)010AS	6.8	6.0	0.30
#68.0	*V	T494V686(1)010AS	6.8	6.0	0.30
100.0	D	T494D107(1)010AS	10.0	8.0	0.15
#100.0	*V	T494V107(1)010AS	10.0	8.0	0.40
150.0	*X	T494X157(1)010AS	15.0	8.0	0.15
#150.0	*D	T494D157(1)010AS	15.0	8.0	0.15
#220.0	*X	T494X227(1)010AS	22.0	8.0	0.15
#220.0	*D	T494D227(1)010AS	22.0	8.0	0.15
#330.0	X	T494X337(1)010AS	33.0	10.0	0.10
#470.0	*X	T494X477(1)010AS	47.0	10.0	0.10
16 Volt Rating at +85°C (10 Volt Rating at +125°C)					
1.0	A	T494A105(1)016AS	0.5	4.0	6.0
1.5	A	T494A155(1)016AS	0.5	6.0	6.0
2.2	A	T494A225(1)016AS	0.5	6.0	4.0
#2.2	*S	T494S225(1)016AS	0.5	6.0	10.0
3.3	B	T494B335(1)016AS	0.5	6.0	2.0
3.3	A	T494A335(1)016AS	0.5	6.0	4.0
4.7	B	T494B475(1)016AS	0.8	6.0	1.5
#4.7	*A	T494A475(1)016AS	0.8	6.0	3.0
#4.7	*T	T494T475(1)016AS	0.8	6.0	3.0
6.8	C	T494C685(1)016AS	1.1	6.0	0.8
6.8	B	T494B685(1)016AS	1.1	6.0	1.2
10.0	C	T494C106(1)016AS	1.6	6.0	0.6
#10.0	*B	T494B106(1)016AS	1.6	6.0	0.8
#10.0	*U	T494U106(1)016AS	1.6	6.0	1.0
15.0	C	T494C156(1)016AS	2.4	6.0	0.4
#15.0	*B	T494B156(1)016AS	2.4	6.0	0.8
#15.0	*U	T494U156(1)016AS	2.4	6.0	0.8
22.0	D	T494D226(1)016AS	3.6	6.0	0.25
22.0	*C	T494C226(1)016AS	3.6	6.0	0.35
33.0	D	T494D336(1)016AS	5.3	6.0	0.25
#33.0	*C	T494C336(1)016AS	5.3	6.0	0.30

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.

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

*Extended Values

**6 Volt product equivalent to 6.3 volt product.

TANTALUM CHIP CAPACITORS

T494 SERIES—Low ESR, Industrial Grade

KEMET

T494 RATINGS & PART NUMBER REFERENCE

Capacitance μF	Case Size	KEMET Part Number	DC Leakage μA @ 25°C Max	DF % @ +25°C 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
16 Volt Rating at +85°C (10 Volt Rating at +125°C) cont'd.					
47.0	D	T494D476(1)016AS	7.5	6.0	0.20
#47.0	*V	T494V476(1)016AS	7.5	6.0	0.30
68.0	*D	T494D686(1)016AS	10.9	6.0	0.15
100.0	*X	T494X107(1)016AS	16.0	8.0	0.15
#100.0	*D	T494D107(1)016AS	16.0	8.0	0.15
#150.0	*X	T494X157(1)016AS	24.0	8.0	0.15
20 Volt Rating at +85°C (13 Volt Rating at +125°C)					
0.68	A	T494A684(1)020AS	0.5	4.0	8.0
1.0	A	T494A105(1)020AS	0.5	4.0	5.5
#1.0	*S	T494S105(1)020AS	0.5	6.0	10.0
1.5	A	T494A155(1)020AS	0.5	6.0	4.5
#1.5	*S	T494S155(1)020AS	0.5	6.0	9.0
2.2	B	T494B225(1)020AS	0.5	6.0	1.5
2.2	A	T494A225(1)020AS	0.5	6.0	4.0
3.3	B	T494B335(1)020AS	0.7	6.0	1.3
#3.3	*A	T494A335(1)020AS	0.7	6.0	4.0
#3.3	*T	T494T335(1)020AS	0.7	6.0	4.0
4.7	C	T494C475(1)020AS	1.0	6.0	0.6
4.7	B	T494B475(1)020AS	1.0	6.0	1.0
6.8	C	T494C685(1)020AS	1.4	6.0	0.6
#6.8	*B	T494B685(1)020AS	1.4	6.0	1.0
#6.8	*U	T494U685(1)020AS	1.4	6.0	1.4
10.0	C	T494C106(1)020AS	2.0	6.0	0.5
#10.0	*B	T494B106(1)020AS	2.0	6.0	1.0
#10.0	*U	T494U106(1)020AS	2.0	6.0	0.8
15.0	D	T494D156(1)020AS	3.0	6.0	0.35
15.0	*C	T494C156(1)020AS	3.0	6.0	0.40
22.0	D	T494D226(1)020AS	4.4	6.0	0.30
#22.0	*C	T494C226(1)020AS	4.4	6.0	0.40
#22.0	*V	T494V226(1)020AS	4.4	6.0	0.40
33.0	D	T494D336(1)020AS	6.6	6.0	0.25
47.0	*D	T494D476(1)020AS	9.4	6.0	0.20
68.0	*X	T494X686(1)020AS	13.6	6.0	0.20
#100.0	*X	T494X107(1)020AS	20.0	8.0	0.15
25 Volt Rating at +85°C (17 Volt Rating at +125°C)					
0.33	A	T494A334(1)025AS	0.5	4.0	10.0
0.47	A	T494A474(1)025AS	0.5	4.0	9.0
0.68	A	T494A684(1)025AS	0.5	4.0	6.0
1.0	B	T494B105(1)025AS	0.5	4.0	2.0
1.0	*A	T494A105(1)025AS	0.5	4.0	4.0
1.5	B	T494B155(1)025AS	0.5	6.0	1.5
1.5	*A	T494A155(1)025AS	0.5	6.0	5.0
2.2	C	T494C225(1)025AS	0.6	6.0	2.2
2.2	*B	T494B225(1)025AS	0.6	6.0	1.2
3.3	C	T494C335(1)025AS	0.9	6.0	1.2
3.3	*B	T494B335(1)025AS	0.9	6.0	2.0

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.

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

Capacitance μF	Case Size	KEMET Part Number	DC Leakage μA @ 25°C Max	DF % @ +25°C 120 Hz Max	ESR Ω @ +25°C 100 kHz Max
25 Volt Rating at +85°C (17 Volt Rating at +125°C) cont'd.					
4.7	C	T494C475(1)025AS	1.2	6.0	0.6
6.8	C	T494C685(1)025AS	1.7	6.0	0.6
10.0	D	T494D106(1)025AS	2.5	6.0	0.4
10.0	*C	T494C106(1)025AS	2.5	6.0	0.6
15.0	D	T494D156(1)025AS	3.8	6.0	0.35
22.0	D	T494D226(1)025AS	5.5	6.0	0.30
33.0	*X	T494X336(1)025AS	8.3	6.0	0.30
35 Volt Rating at +85°C (23 Volt Rating at +125°C)					
0.10	A	T494A104(1)035AS	0.5	4.0	10.0
0.15	A	T494A154(1)035AS	0.5	4.0	6.0
0.22	A	T494A224(1)035AS	0.5	4.0	6.0
0.33	A	T494A334(1)035AS	0.5	4.0	6.0
0.47	B	T494B474(1)035AS	0.5	4.0	2.5
0.47	*A	T494A474(1)035AS	0.5	4.0	4.0
0.68	B	T494B684(1)035AS	0.5	4.0	2.5
0.68	*A	T494A684(1)035AS	0.5	4.0	6.0
1.0	B	T494B105(1)035AS	0.5	4.0	2.0
1.0	*A	T494A105(1)035AS	0.5	4.0	6.0
1.5	C	T494C155(1)035AS	0.5	6.0	2.5
1.5	*B	T494B155(1)035AS	0.5	6.0	3.0
2.2	C	T494C225(1)035AS	0.8	6.0	1.5
2.2	*B	T494B225(1)035AS	0.8	6.0	2.5
3.3	C	T494C335(1)035AS	1.2	6.0	0.8
4.7	D	T494D475(1)035AS	1.7	6.0	0.7
4.7	*C	T494C475(1)035AS	1.7	6.0	0.7
6.8	D	T494D685(1)035AS	2.4	6.0	0.5
6.8	*C	T494C685(1)035AS	2.4	6.0	0.9
10.0	*D	T494D106(1)035AS	3.5	6.0	0.4
15.0	*X	T494X156(1)035AS	5.3	6.0	0.30
15.0	*D	T494D156(1)035AS	5.3	6.0	0.35
22.0	*X	T494X226(1)035AS	7.7	6.0	0.30
50 Volt Rating at +85°C (33 Volt Rating at +125°C)					
0.10	A	T494A104(1)050AS	0.5	4.0	10.0
0.15	B	T494B154(1)050AS	0.5	4.0	10.0
0.15	*A	T494A154(1)050AS	0.5	4.0	10.0
0.22	B	T494B224(1)050AS	0.5	4.0	10.0
0.33	B	T494B334(1)050AS	0.5	4.0	2.5
0.47	C	T494C474(1)050AS	0.5	4.0	1.8
0.47	*B	T494B474(1)050AS	0.5	4.0	2.0
0.68	C	T494C684(1)050AS	0.5	4.0	1.6
0.68	*B	T494B684(1)050AS	0.5	4.0	3.0
1.0	C	T494C105(1)050AS	0.5	4.0	1.6
1.5	D	T494D155(1)050AS	0.8	6.0	1.0
1.5	*C	T494C155(1)050AS	0.8	6.0	1.5
2.2	D	T494D225(1)050AS	1.1	6.0	0.8
2.2	*C	T494C225(1)050AS	1.1	6.0	1.5
3.3	D	T494D335(1)050AS	1.7	6.0	0.8
4.7	*D	T494D475(1)050AS	2.4	6.0	0.6
6.8	*X	T494X685(1)050AS	3.5	6.0	0.5

*Extended Values **6 Volt product equivalent to 6.3 volt product.
#Maximum Capacitance Change @ 125°C=+15%. (All others = +12%)

CAPACITOR MARKINGS

T494 Series — All Case Sizes

