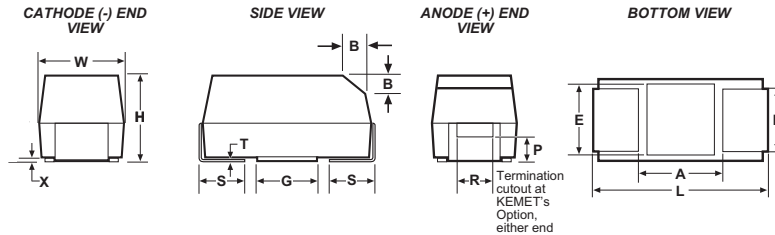


## T494 SERIES — Low ESR, Industrial Grade

### 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, E, U, V, X sizes
- Capacitance: 0.1  $\mu$ F to 1000  $\mu$ F
- Tolerance:  $\pm 10\%$ ,  $\pm 20\%$
- Voltage: 3-50 VDC
- Extended Range Values
- Low Profile Case Sizes
- RoHS Compliant & Leadfree Terminations (See www.kemet.com for lead transition)
- Operating Temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### CAPACITOR OUTLINE DRAWING



### STANDARD T494 DIMENSIONS Millimeters (inches)

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

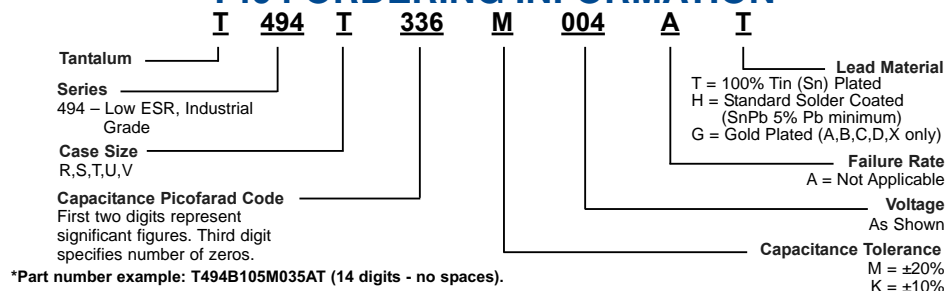
Notes: 1. Metric dimensions govern  
2. (Ref) Dimensions provided for reference only  
\* Mil-PRF-55365/8 Specified Dimensions

### LOW PROFILE T494 DIMENSIONS Millimeters (inches)

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



Solid Tantalum Surface Mount

### T494 RATINGS & PART NUMBER REFERENCE

| Capacitance<br>µF   | Case<br>Size | KEMET<br>Part Number | DC<br>Leakage<br>µA @ 25°C<br>Max | DF %<br>@ +25°C<br>120 Hz<br>Max | ESR Ω<br>@ +25°C<br>100 kHz<br>Max |
|---|--------------|----------------------|-----------------------------------|----------------------------------|------------------------------------|
| <b>2.5 Volt Rating at +85°C (1.7 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 100.0   | T            | T494T107(1)2R5A(2)   | 2.5                               | 24.0                             | 3.5                                |
| 220.0   | D            | T494D227(1)2R5A(2)   | 5.5                               | 8.0                              | 0.2                                |
| <b>3 Volt Rating at +85°C (2 Volt Rating at +125°C)</b>     |              |                      |                                   |                                  |                                    |
| #33.0   | A            | T494A336(1)003A(2)   | 1.0                               | 6.0                              | 2.0                                |
| <b>4 Volt Rating at +85°C (2.7 Volt Rating at +125°C)</b>   |              |                      |                                   |                                  |                                    |
| 3.3   | A            | T494A335(1)004A(2)   | 0.5                               | 6.0                              | 4.0                                |
| 4.7   | A            | T494A475(1)004A(2)   | 0.5                               | 6.0                              | 3.5                                |
| 6.8   | A            | T494A685(1)004A(2)   | 0.5                               | 6.0                              | 3.0                                |
| 6.8   | S            | T494S685(1)004A(2)   | 0.5                               | 6.0                              | 7.0                                |
| 10.0  | B            | T494B106(1)004A(2)   | 0.5                               | 6.0                              | 1.2                                |
| 10.0  | A            | T494A106(1)004A(2)   | 0.5                               | 6.0                              | 2.0                                |
| #10.0   | S            | T494S106(1)004A(2)   | 0.5                               | 6.0                              | 9.0                                |
| #10.0   | R            | T494R106M004A(2)     | 0.5                               | 8.0                              | 6.0                                |
| 15.0  | B            | T494B156(1)004A(2)   | 0.6                               | 6.0                              | 1.2                                |
| 15.0  | A            | T494A156(1)004A(2)   | 0.6                               | 6.0                              | 1.5                                |
| 15.0  | T            | T494T156(1)004A(2)   | 0.6                               | 6.0                              | 2.0                                |
| #15.0   | S            | T494S156M004A(2)     | 0.6                               | 10.0                             | 9.0                                |
| 22.0  | C            | T494C226(1)004A(2)   | 0.9                               | 6.0                              | 0.5                                |
| 22.0  | B            | T494B226(1)004A(2)   | 0.9                               | 6.0                              | 0.6                                |
| #22.0   | A            | T494A226(1)004A(2)   | 0.9                               | 6.0                              | 1.5                                |
| #22.0   | S            | T494S226M004A(2)     | 0.9                               | 10.0                             | 8.0                                |
| #22.0   | T            | T494T226(1)004A(2)   | 0.9                               | 6.0                              | 2.5                                |
| 33.0  | C            | T494C336(1)004A(2)   | 1.3                               | 6.0                              | 0.5                                |
| 33.0  | U            | T494U336(1)004A(2)   | 1.3                               | 6.0                              | 0.6                                |
| 33.0  | B            | T494B336(1)004A(2)   | 1.3                               | 6.0                              | 0.5                                |
| #33.0   | A            | T494A336(1)004A(2)   | 1.3                               | 6.0                              | 3.0                                |
| #33.0   | T            | T494T336M004A(2)     | 1.3                               | 8.0                              | 3.5                                |
| 47.0  | C            | T494C476(1)004A(2)   | 1.9                               | 6.0                              | 0.5                                |
| 47.0  | U            | T494U476(1)004A(2)   | 1.9                               | 6.0                              | 0.6                                |
| #47.0   | B            | T494B476(1)004A(2)   | 1.9                               | 6.0                              | 0.5                                |
| #47.0   | A            | T494A476M004A(2)     | 1.9                               | 12.0                             | 2.0                                |
| #47.0   | T            | T494T476M004A(2)     | 1.9                               | 12.0                             | 4.0                                |
| 68.0  | D            | T494D686(1)004A(2)   | 2.7                               | 6.0                              | 0.20                               |
| 68.0  | C            | T494C686(1)004A(2)   | 2.7                               | 6.0                              | 0.25                               |
| #68.0   | U            | T494U686(1)004A(2)   | 2.7                               | 6.0                              | 0.60                               |
| #68.0   | B            | T494B686(1)004A(2)   | 2.7                               | 6.0                              | 2.00                               |
| #68.0   | A            | T494A686(1)004A(2)   | 2.8                               | 30.0                             | 3.00                               |
| 100.0   | D            | T494D107(1)004A(2)   | 4.0                               | 8.0                              | 0.20                               |
| #100.0  | C            | T494C107(1)004A(2)   | 4.0                               | 8.0                              | 0.20                               |
| #100.0  | U            | T494U107(1)004A(2)   | 4.0                               | 10.0                             | 1.00                               |
| #100.0  | B            | T494B107M004A(2)     | 4.0                               | 8.0                              | 0.65                               |
| †100.0  | A            | T494A107M004A(2)     | 4.0                               | 30.0                             | 3.00                               |
| †100.0  | T            | T494T107M004A(2)     | 4.0                               | 30.0                             | 4.50                               |
| 150.0   | D            | T494D157(1)004A(2)   | 6.0                               | 8.0                              | 0.15                               |
| 150.0   | V            | T494V157(1)004A(2)   | 6.0                               | 8.0                              | 0.20                               |
| #150.0  | C            | T494C157(1)004A(2)   | 6.0                               | 8.0                              | 0.30                               |
| †150.0  | B            | T494B157M004A(2)     | 6.0                               | 12.0                             | 1.00                               |
| #220.0  | V            | T494V227(1)004A(2)   | 8.8                               | 8.0                              | 0.30                               |
| #220.0  | B            | T494B227M004A(2)     | 8.8                               | 8.0                              | 0.40                               |
| #330.0  | D            | T494D337(1)004A(2)   | 13.2                              | 8.0                              | 0.15                               |
| #330.0  | C            | T494C337(1)004A(2)   | 13.2                              | 10.0                             | 0.09                               |
| †330.0  | V            | T494V337(1)004A(2)   | 13.2                              | 12.0                             | 0.30                               |
| #470.0  | X            | T494X477(1)004A(2)   | 18.8                              | 8.0                              | 0.15                               |
| #470.0  | D            | T494D477(1)004A(2)   | 18.8                              | 8.0                              | 0.15                               |
| #680.0  | X            | T494X687M004A(2)     | 27.2                              | 12.0                             | 0.10                               |
| #680.0  | D            | T494D687M004A(2)     | 27.2                              | 12.0                             | 0.15                               |
| #1000.0   | X            | T494X108(1)004A(2)   | 40.0                              | 12.0                             | 0.10                               |
| #1000.0   | E            | T494E108M004A(2)     | 40.0                              | 15.0                             | 0.08                               |
| <b>**6.3 Volt Rating at +85°C (4 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 2.2   | R            | T494R225(1)006A(2)   | 0.5                               | 6.0                              | 20.0                               |
| 2.2   | A            | T494A225(1)006A(2)   | 0.5                               | 6.0                              | 6.0                                |
| 3.3   | A            | T494A335(1)006A(2)   | 0.5                               | 6.0                              | 6.0                                |
| 4.7   | A            | T494A475(1)006A(2)   | 0.5                               | 6.0                              | 3.5                                |
| 4.7   | S            | T494S475(1)006A(2)   | 0.5                               | 6.0                              | 8.0                                |
| 6.8   | B            | T494B685(1)006A(2)   | 0.5                               | 6.0                              | 1.2                                |
| 6.8   | A            | T494A685(1)006A(2)   | 0.5                               | 6.0                              | 2.0                                |
| #6.8  | S            | T494S685(1)006A(2)   | 0.5                               | 6.0                              | 9.0                                |
| #6.8  | R            | T494R685(1)006A(2)   | 0.5                               | 8.0                              | 10.0                               |
| 10.0  | B            | T494B106(1)006A(2)   | 0.6                               | 6.0                              | 1.0                                |
| 10.0  | A            | T494A106(1)006A(2)   | 0.6                               | 6.0                              | 2.0                                |
| 10.0  | T            | T494T106(1)006A(2)   | 0.6                               | 6.0                              | 1.2                                |
| #10.0   | S            | T494S106M006A(2)     | 0.6                               | 10.0                             | 9.0                                |
| #10.0   | R            | T494R106M006A(2)     | 0.6                               | 8.0                              | 6.0                                |

| Capacitance<br>µF   | Case<br>Size | KEMET<br>Part Number | DC<br>Leakage<br>µA @ 25°C<br>Max | DF %<br>@ +25°C<br>120 Hz<br>Max | ESR Ω<br>@ +25°C<br>100 kHz<br>Max |
|---|--------------|----------------------|-----------------------------------|----------------------------------|------------------------------------|
| <b>**6 Volt Rating at +85°C (4 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 15.0  | C            | T494C156(1)006A(2)   | 0.9                               | 6.0                              | 0.6                                |
| 15.0  | B            | T494B156(1)006A(2)   | 0.9                               | 6.0                              | 0.7                                |
| #15.0   | A            | T494A156(1)006A(2)   | 0.9                               | 6.0                              | 2.0                                |
| #15.0   | T            | T494T156(1)006A(2)   | 0.9                               | 6.0                              | 2.5                                |
| #15.0   | S            | T494S156M006A(2)     | 0.9                               | 10.0                             | 10.0                               |
| 22.0  | C            | T494C226(1)006A(2)   | 1.4                               | 6.0                              | 0.5                                |
| 22.0  | U            | T494U226(1)006A(2)   | 1.4                               | 6.0                              | 0.8                                |
| 22.0  | B            | T494B226(1)006A(2)   | 1.4                               | 6.0                              | 0.6                                |
| #22.0   | A            | T494A226(1)006A(2)   | 1.4                               | 6.0                              | 3.0                                |
| #22.0   | T            | T494T226M006A(2)     | 1.4                               | 8.0                              | 3.5                                |
| 33.0  | C            | T494C336(1)006A(2)   | 2.0                               | 6.0                              | 0.3                                |
| 33.0  | U            | T494U336(1)006A(2)   | 2.0                               | 6.0                              | 0.6                                |
| #33.0   | B            | T494B336(1)006A(2)   | 2.0                               | 6.0                              | 0.6                                |
| #33.0   | A            | T494A336(1)006A(2)   | 2.0                               | 12.0                             | 2.0                                |
| #33.0   | T            | T494T336M006A(2)     | 2.0                               | 12.0                             | 4.0                                |
| 47.0  | D            | T494D476(1)006A(2)   | 2.9                               | 6.0                              | 0.22                               |
| 47.0  | C            | T494C476(1)006A(2)   | 2.9                               | 6.0                              | 0.25                               |
| #47.0   | U            | T494U476(1)006A(2)   | 2.9                               | 6.0                              | 0.60                               |
| #47.0   | B            | T494B476(1)006A(2)   | 2.9                               | 6.0                              | 0.50                               |
| †47.0   | A            | T494A476M006A(2)     | 3.0                               | 12.0                             | 2.50                               |
| 47.0  | T            | T494T476(1)006A(2)   | 3.0                               | 24.0                             | 4.00                               |
| 68.0  | D            | T494D686(1)006A(2)   | 4.1                               | 6.0                              | 0.20                               |
| #68.0   | C            | T494C686(1)006A(2)   | 4.1                               | 6.0                              | 0.20                               |
| #68.0   | U            | T494U686(1)006A(2)   | 4.1                               | 10.0                             | 1.00                               |
| #68.0   | B            | T494B686M006A(2)     | 4.1                               | 8.0                              | 0.65                               |
| #68.0   | A            | T494A686(1)006A(2)   | 5.0                               | 30.0                             | 3.00                               |
| 100.0   | D            | T494D107(1)006A(2)   | 6.0                               | 8.0                              | 0.15                               |
| 100.0   | V            | T494V107(1)006A(2)   | 6.0                               | 8.0                              | 0.20                               |
| #100.0  | C            | T494C107(1)006A(2)   | 6.0                               | 8.0                              | 0.30                               |
| #100.0  | U            | T494U107M006A(2)     | 6.0                               | 10.0                             | 1.20                               |
| #100.0  | B            | T494B107(1)006A(2)   | 6.0                               | 15.0                             | 1.50                               |
| 150.0   | D            | T494D157(1)006A(2)   | 9.0                               | 8.0                              | 0.15                               |
| #150.0  | C            | T494C157M006A(2)     | 9.0                               | 8.0                              | 0.30                               |
| #150.0  | V            | T494V157(1)006A(2)   | 9.0                               | 8.0                              | 0.30                               |
| 220.0   | X            | T494X227(1)006A(2)   | 13.2                              | 8.0                              | 0.15                               |
| #220.0  | D            | T494D227(1)006A(2)   | 13.2                              | 8.0                              | 0.15                               |
| #220.0  | C            | T494C227M006A(2)     | 13.2                              | 10.0                             | 0.30                               |
| #220.0  | V            | T494V227M006A(2)     | 13.2                              | 12.0                             | 0.30                               |
| #330.0  | X            | T494X337(1)006A(2)   | 19.8                              | 8.0                              | 0.15                               |
| #330.0  | D            | T494D337(1)006A(2)   | 19.8                              | 8.0                              | 0.15                               |
| #330.0  | E            | T494E337(1)006A(2)   | 20.8                              | 8.0                              | 0.25                               |
| #470.0  | X            | T494X477(1)006A(2)   | 28.2                              | 10.0                             | 0.10                               |
| #470.0  | D            | T494D477M006A(2)     | 28.2                              | 12.0                             | 0.15                               |
| #470.0  | E            | T494E477(1)006A(2)   | 29.6                              | 10.0                             | 0.20                               |
| #680.0  | E            | T494E687M006A(2)     | 40.8                              | 12.0                             | 0.10                               |
| <b>10 Volt Rating at +85°C (7 Volt Rating at +125°C)</b>  |              |                      |                                   |                                  |                                    |
| 1.5   | A            | T494A155(1)010A(2)   | 0.5                               | 6.0                              | 6.0                                |
| 2.2   | B            | T494B225(1)010A(2)   | 0.5                               | 6.0                              | 1.5                                |
| 2.2   | A            | T494A225(1)010A(2)   | 0.5                               | 6.0                              | 6.0                                |
| 3.3   | A            | T494A335(1)010A(2)   | 0.5                               | 6.0                              | 4.0                                |
| 3.3   | S            | T494S335(1)010A(2)   | 0.5                               | 6.0                              | 9.0                                |
| #3.3  | R            | T494R335(1)010A(2)   | 0.3                               | 8.0                              | 10.0                               |
| 4.7   | B            | T494B475(1)010A(2)   | 0.5                               | 6.0                              | 1.5                                |
| 4.7   | A            | T494A475(1)010A(2)   | 0.5                               | 6.0                              | 3.0                                |
| #4.7  | S            | T494S475(1)010A(2)   | 0.5                               | 6.0                              | 9.0                                |
| #4.7  | R            | T494R475M010A(2)     | 0.5                               | 8.0                              | 8.0                                |
| 6.8   | B            | T494B685(1)010A(2)   | 0.7                               | 6.0                              | 1.2                                |
| 6.8   | A            | T494A685(1)010A(2)   | 0.7                               | 6.0                              | 3.0                                |
| 6.8   | T            | T494T685(1)010A(2)   | 0.7                               | 6.0                              | 2.0                                |
| #6.8  | S            | T494S685M010A(2)     | 0.7                               | 10.0                             | 9.0                                |
| 10.0  | C            | T494C106(1)010A(2)   | 1.0                               | 6.0                              | 0.6                                |
| 10.0  | B            | T494B106(1)010A(2)   | 1.0                               | 6.0                              | 0.8                                |
| #10.0   | A            | T494A106(1)010A(2)   | 1.0                               | 6.0                              | 1.8                                |
| #10.0   | T            | T494T106(1)010A(2)   | 1.0                               | 6.0                              | 3.5                                |
| #10.0   | S            | T494S106M010A(2)     | 1.0                               | 10.0                             | 12.0                               |
| #10.0   | R            | T494R106M010A(2)     | 1.0                               | 24.0                             | 25.0                               |
| 15.0  | C            | T494C156(1)010A(2)   | 1.5                               | 6.0                              | 0.5                                |
| 15.0  | U            | T494U156(1)010A(2)   | 1.5                               | 6.0                              | 0.8                                |
| 15.0  | B            | T494B156(1)010A(2)   | 1.5                               | 6.0                              | 0.7                                |
| #15.0   | A            | T494A156(1)010A(2)   | 1.5                               | 8.0                              | 4.0                                |
| #15.0   | T            | T494T156M010A(2)     | 1.5                               | 8.0                              | 3.5                                |

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.  
 (2) To complete KEMET Part Number, insert H, G, or T lead material designation as shown on page 27.  
 \*Extended Values

\*\*6 Volt product equivalent to 6.3 volt product.  
 #Maximum Capacitance Change @ 125°C=+15%.  
 †Maximum Capacitance Change @ 125°C=+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



T494 SERIES—Low ESR, Industrial Grade

## T494 RATINGS & PART NUMBER REFERENCE

Solid Tantalum Surface Mount

| Capacitance<br>µF   | Case<br>Size | KEMET<br>Part Number | DC<br>Leakage<br>µA @ 25°C<br>Max | DF %<br>@ +25°C<br>120 Hz<br>Max | ESR Ω<br>@ +25°C<br>100 kHz<br>Max |
|---|--------------|----------------------|-----------------------------------|----------------------------------|------------------------------------|
| <b>10 Volt Rating at +85°C (7 Volt Rating at +125°C)</b>  |              |                      |                                   |                                  |                                    |
| 22.0  | C            | T494C226(1)010A(2)   | 2.2                               | 6.0                              | 0.4                                |
| 22.0  | U            | T494U226(1)010A(2)   | 2.2                               | 6.0                              | 0.8                                |
| #22.0   | B            | T494B226(1)010A(2)   | 2.2                               | 6.0                              | 0.7                                |
| #22.0   | A            | T494A226M010A(2)     | 2.2                               | 10.0                             | 4.5                                |
| #22.0   | T            | T494T226M010A(2)     | 2.2                               | 12.0                             | 6.0                                |
| 33.0  | D            | T494D336(1)010A(2)   | 3.3                               | 6.0                              | 0.25                               |
| 33.0  | V            | T494V336(1)010A(2)   | 3.3                               | 6.0                              | 0.30                               |
| 33.0  | C            | T494C336(1)010A(2)   | 3.3                               | 6.0                              | 0.30                               |
| #33.0   | U            | T494U336(1)010A(2)   | 3.3                               | 6.0                              | 0.60                               |
| #33.0   | T            | T494T336(1)010A(2)   | 3.3                               | 24.0                             | 3.75                               |
| #33.0   | B            | T494B336(1)010A(2)   | 3.3                               | 6.0                              | 1.40                               |
| #33.0   | A            | T494A336(1)010A(2)   | 3.3                               | 15.0                             | 4.00                               |
| 47.0  | D            | T494D476(1)010A(2)   | 4.7                               | 6.0                              | 0.22                               |
| 47.0  | V            | T494V476(1)010A(2)   | 4.7                               | 6.0                              | 0.30                               |
| #47.0   | C            | T494C476(1)010A(2)   | 4.7                               | 6.0                              | 0.30                               |
| #47.0   | U            | T494U476(1)010A(2)   | 4.7                               | 10.0                             | 1.20                               |
| #47.0   | B            | T494B476M010A(2)     | 4.7                               | 8.0                              | 0.65                               |
| 68.0  | D            | T494D686(1)010A(2)   | 6.8                               | 6.0                              | 0.20                               |
| #68.0   | C            | T494C686(1)010A(2)   | 6.8                               | 6.0                              | 0.30                               |
| 68.0  | V            | T494V686(1)010A(2)   | 6.8                               | 6.0                              | 0.30                               |
| #68.0   | U            | T494U686M010A(2)     | 6.8                               | 10.0                             | 1.20                               |
| #68.0   | B            | T494B686M010A(2)     | 6.8                               | 10.0                             | 1.50                               |
| 100.0   | D            | T494D107(1)010A(2)   | 10.0                              | 8.0                              | 0.15                               |
| #100.0  | C            | T494C107(1)010A(2)   | 10.0                              | 8.0                              | 0.20                               |
| #100.0  | V            | T494V107(1)010A(2)   | 10.0                              | 8.0                              | 0.40                               |
| 150.0   | X            | T494X157(1)010A(2)   | 15.0                              | 8.0                              | 0.15                               |
| #150.0  | D            | T494D157(1)010A(2)   | 15.0                              | 8.0                              | 0.15                               |
| #150.0  | C            | T494C157(1)010A(2)   | 15.0                              | 10.0                             | 0.70                               |
| #150.0  | V            | T494V157M010A(2)     | 15.0                              | 8.0                              | 0.30                               |
| #220.0  | X            | T494X227(1)010A(2)   | 22.0                              | 8.0                              | 0.15                               |
| #220.0  | D            | T494D227(1)010A(2)   | 22.0                              | 8.0                              | 0.15                               |
| #220.0  | V            | T494V227(1)010A(2)   | 22.0                              | 12.0                             | 0.50                               |
| #330.0  | X            | T494X337(1)010A(2)   | 33.0                              | 10.0                             | 0.10                               |
| #330.0  | D            | T494D337M010A(2)     | 33.0                              | 10.0                             | 0.15                               |
| #330.0  | E            | T494E337(1)010A(2)   | 33.0                              | 10.0                             | 0.25                               |
| #470.0  | X            | T494X477M010A(2)     | 47.0                              | 10.0                             | 0.10                               |
| #470.0  | E            | T494E477M010A(2)     | 47.0                              | 12.0                             | 0.10                               |
| <b>16 Volt Rating at +85°C (10 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 1.0   | A            | T494A105(1)016A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 1.5   | A            | T494A155(1)016A(2)   | 0.5                               | 6.0                              | 6.0                                |
| 2.2   | A            | T494A225(1)016A(2)   | 0.5                               | 6.0                              | 4.0                                |
| 2.2   | S            | T494S225(1)016A(2)   | 0.5                               | 6.0                              | 10.0                               |
| #2.2  | R            | T494R225(1)016A(2)   | 0.5                               | 8.0                              | 20.0                               |
| 3.3   | B            | T494B335(1)016A(2)   | 0.5                               | 6.0                              | 2.0                                |
| 3.3   | A            | T494A335(1)016A(2)   | 0.5                               | 6.0                              | 4.0                                |
| 4.7   | B            | T494B475(1)016A(2)   | 0.8                               | 6.0                              | 1.5                                |
| 4.7   | A            | T494A475(1)016A(2)   | 0.8                               | 6.0                              | 3.0                                |
| 4.7   | T            | T494T475(1)016A(2)   | 0.8                               | 6.0                              | 3.0                                |
| 6.8   | C            | T494C685(1)016A(2)   | 1.1                               | 6.0                              | 0.8                                |
| 6.8   | B            | T494B685(1)016A(2)   | 1.1                               | 6.0                              | 1.2                                |
| #6.8  | A            | T494A685(1)016A(2)   | 1.1                               | 6.0                              | 3.0                                |
| 10.0  | C            | T494C106(1)016A(2)   | 1.6                               | 6.0                              | 0.6                                |
| 10.0  | U            | T494U106(1)016A(2)   | 1.6                               | 6.0                              | 1.0                                |
| 10.0  | B            | T494B106(1)016A(2)   | 1.6                               | 6.0                              | 0.8                                |
| #10.0   | A            | T494A106(1)016A(2)   | 1.6                               | 8.0                              | 3.0                                |
| #10.0   | T            | T494T106(1)016A(2)   | 1.6                               | 8.0                              | 6.0                                |
| 15.0  | C            | T494C156(1)016A(2)   | 2.4                               | 6.0                              | 0.4                                |
| 15.0  | U            | T494U156(1)016A(2)   | 2.4                               | 6.0                              | 0.8                                |
| #15.0   | B            | T494B156(1)016A(2)   | 2.4                               | 6.0                              | 0.8                                |
| 22.0  | D            | T494D226(1)016A(2)   | 3.6                               | 6.0                              | 0.25                               |
| 22.0  | C            | T494C226(1)016A(2)   | 3.6                               | 6.0                              | 0.35                               |
| #22.0   | U            | T494U226(1)016A(2)   | 3.6                               | 10.0                             | 1.80                               |
| #22.0   | B            | T494B226(1)016A(2)   | 3.6                               | 6.0                              | 1.00                               |
| 33.0  | D            | T494D336(1)016A(2)   | 5.3                               | 6.0                              | 0.25                               |
| #33.0   | C            | T494C336(1)016A(2)   | 5.3                               | 6.0                              | 0.30                               |
| #33.0   | U            | T494U336(1)016A(2)   | 5.3                               | 12.0                             | 2.20                               |
| 47.0  | D            | T494D476(1)016A(2)   | 7.5                               | 6.0                              | 0.2                                |
| 47.0  | V            | T494V476(1)016A(2)   | 7.5                               | 6.0                              | 0.3                                |
| #47.0   | C            | T494C476(1)016A(2)   | 7.5                               | 6.0                              | 0.5                                |
| 68.0  | D            | T494D686(1)016A(2)   | 10.9                              | 6.0                              | 0.15                               |
| #68.0   | V            | T494V686(1)016A(2)   | 10.9                              | 6.0                              | 0.5                                |
| #68.0   | C            | T494C686(1)016A(2)   | 10.9                              | 12.0                             | 1.0                                |

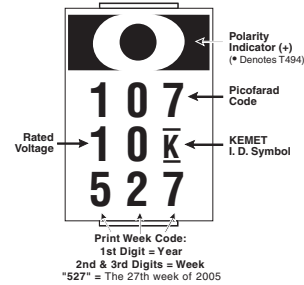
| Capacitance<br>µF   | Case<br>Size | KEMET<br>Part Number | DC<br>Leakage<br>µA @ 25°C<br>Max | DF %<br>@ +25°C<br>120 Hz<br>Max | ESR Ω<br>@ +25°C<br>100 kHz<br>Max |
|---|--------------|----------------------|-----------------------------------|----------------------------------|------------------------------------|
| <b>16 Volt Rating at +85°C (10 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 100.0   | X            | T494X107(1)016A(2)   | 16.0                              | 8.0                              | 0.15                               |
| #100.0  | D            | T494D107(1)016A(2)   | 16.0                              | 8.0                              | 0.15                               |
| †100.0  | V            | T494V107(1)016A(2)   | 16.0                              | 12.0                             | 0.5                                |
| #150.0  | X            | T494X157(1)016A(2)   | 24.0                              | 8.0                              | 0.15                               |
| #150.0  | D            | T494D157(1)016A(2)   | 24.0                              | 12.0                             | 0.4                                |
| #220.0  | X            | T494X227(1)016A(2)   | 35.2                              | 10.0                             | 0.4                                |
| #220.0  | E            | T494E227(1)016A(2)   | 35.2                              | 7.2                              | 0.5                                |
| <b>20 Volt Rating at +85°C (13 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 0.68  | A            | T494A684(1)020A(2)   | 0.5                               | 4.0                              | 8.0                                |
| 1.0   | A            | T494A105(1)020A(2)   | 0.5                               | 4.0                              | 5.5                                |
| 1.0   | S            | T494S105(1)020A(2)   | 0.5                               | 6.0                              | 10.0                               |
| †1.0  | R            | T494R105(1)020A(2)   | 0.2                               | 6.0                              | 15.0                               |
| 1.5   | A            | T494A155(1)020AS(2)  | 0.5                               | 6.0                              | 4.5                                |
| 1.5   | S            | T494S155(1)020A(2)   | 0.5                               | 6.0                              | 9.0                                |
| 2.2   | B            | T494B225(1)020A(2)   | 0.5                               | 6.0                              | 1.5                                |
| 2.2   | A            | T494A225(1)020A(2)   | 0.5                               | 6.0                              | 4.0                                |
| 2.2   | R            | T494R225(1)020A(2)   | 0.4                               | 8.0                              | 6.0                                |
| 3.3   | B            | T494B335(1)020A(2)   | 0.7                               | 6.0                              | 1.3                                |
| #3.3  | A            | T494A335(1)020A(2)   | 0.7                               | 6.0                              | 4.0                                |
| 3.3   | T            | T494T335(1)020A(2)   | 0.7                               | 6.0                              | 4.0                                |
| 4.7   | C            | T494C475(1)020A(2)   | 1.0                               | 6.0                              | 0.6                                |
| 4.7   | B            | T494B475(1)020A(2)   | 1.0                               | 6.0                              | 1.0                                |
| #4.7  | A            | T494A475(1)020A(2)   | 1.0                               | 6.0                              | 3.0                                |
| 6.8   | C            | T494C685(1)020A(2)   | 1.4                               | 6.0                              | 0.6                                |
| 6.8   | U            | T494U685(1)020A(2)   | 1.4                               | 6.0                              | 1.4                                |
| #6.8  | B            | T494B685(1)020A(2)   | 1.4                               | 6.0                              | 1.0                                |
| #6.8  | A            | T494A685M020A(2)     | 1.4                               | 8.0                              | 3.0                                |
| 10.0  | C            | T494C106(1)020A(2)   | 2.0                               | 6.0                              | 0.5                                |
| 10.0  | U            | T494U106(1)020A(2)   | 2.0                               | 6.0                              | 0.8                                |
| #10.0   | B            | T494B106(1)020A(2)   | 2.0                               | 6.0                              | 1.0                                |
| #10.0   | A            | T494A106M020A(2)     | 2.0                               | 10.0                             | 3.0                                |
| 15.0  | D            | T494D156(1)020A(2)   | 3.0                               | 6.0                              | 0.35                               |
| 15.0  | C            | T494C156(1)020A(2)   | 3.0                               | 6.0                              | 0.40                               |
| 22.0  | D            | T494D226(1)020A(2)   | 4.4                               | 6.0                              | 0.3                                |
| 22.0  | V            | T494V226(1)020A(2)   | 4.4                               | 6.0                              | 0.4                                |
| #22.0   | C            | T494C226(1)020A(2)   | 4.4                               | 6.0                              | 0.4                                |
| #22.0   | B            | T494B226(1)020A(2)   | 4.4                               | 8.0                              | 3.0                                |
| 33.0  | D            | T494D336(1)020A(2)   | 6.6                               | 6.0                              | 0.25                               |
| #33.0   | C            | T494C336M020A(2)     | 6.6                               | 6.0                              | 0.40                               |
| †33.0   | V            | T494V336(1)020A(2)   | 6.6                               | 8.0                              | 0.40                               |
| 47.0  | C            | T494C476M020A(2)     | 9.4                               | 10.0                             | 0.80                               |
| 47.0  | D            | T494D476(1)020A(2)   | 9.4                               | 6.0                              | 0.20                               |
| 68.0  | X            | T494X686(1)020A(2)   | 13.6                              | 6.0                              | 0.20                               |
| #68.0   | D            | T494D686(1)020A(2)   | 13.6                              | 8.0                              | 0.20                               |
| #100.0  | X            | T494X107(1)020A(2)   | 20.0                              | 8.0                              | 0.15                               |
| #100.0  | E            | T494E107(1)020A(2)   | 20.0                              | 8.0                              | 0.30                               |
| #150.0  | X            | T494X157(1)020A(2)   | 30.0                              | 10.0                             | 0.30                               |
| <b>25 Volt Rating at +85°C (17 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 0.33  | A            | T494A334(1)025A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.47  | A            | T494A474(1)025A(2)   | 0.5                               | 4.0                              | 9.0                                |
| 0.68  | A            | T494A684(1)025A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 1.0   | B            | T494B105(1)025A(2)   | 0.5                               | 4.0                              | 2.0                                |
| 1.0   | A            | T494A105(1)025A(2)   | 0.5                               | 4.0                              | 4.0                                |
| 1.5   | B            | T494B155(1)025A(2)   | 0.5                               | 6.0                              | 1.5                                |
| 1.5   | A            | T494A155(1)025A(2)   | 0.5                               | 6.0                              | 3.0                                |
| 1.5   | R            | T494R155(1)025A(2)   | 0.4                               | 8.0                              | 6.0                                |
| 2.2   | C            | T494C225(1)025A(2)   | 0.6                               | 6.0                              | 2.2                                |
| 2.2   | B            | T494B225(1)025A(2)   | 0.6                               | 6.0                              | 1.2                                |
| 3.3   | C            | T494C335(1)025A(2)   | 0.9                               | 6.0                              | 1.2                                |
| 3.3   | B            | T494B335(1)025A(2)   | 0.9                               | 6.0                              | 2.0                                |
| 4.7   | C            | T494C475(1)025A(2)   | 1.2                               | 6.0                              | 0.6                                |
| #4.7  | B            | T494B475(1)025A(2)   | 1.2                               | 6.0                              | 1.0                                |
| #4.7  | A            | T494A475M025A(2)     | 1.2                               | 8.0                              | 3.0                                |
| 6.8   | C            | T494C685(1)025A(2)   | 1.7                               | 6.0                              | 0.6                                |
| 6.8   | B            | T494B685(1)025A(2)   | 1.7                               | 8.0                              | 2.0                                |
| 10.0  | D            | T494D106(1)025A(2)   | 2.5                               | 6.0                              | 0.4                                |
| 10.0  | C            | T494C106(1)025A(2)   | 2.5                               | 6.0                              | 0.6                                |
| 10.0  | B            | T494B106(1)025A(2)   | 2.5                               | 8.0                              | 3.0                                |
| 15.0  | D            | T494D156(1)025A(2)   | 3.8                               | 6.0                              | 0.35                               |
| #15.0   | C            | T494C156(1)025A(2)   | 3.8                               | 6.0                              | 0.90                               |
| #15.0   | B            | T494B156(1)025A(2)   | 3.8                               | 8.0                              | 3.00                               |
| 22.0  | D            | T494D226(1)025A(2)   | 5.5                               | 6.0                              | 0.3                                |
| 22.0  | C            | T494C226(1)025A(2)   | 5.5                               | 6.0                              | 1.0                                |
| 22.0  | V            | T494V226(1)025A(2)   | 5.5                               | 6.0                              | 0.5                                |
| 33.0  | X            | T494X336(1)025A(2)   | 8.3                               | 6.0                              | 0.3                                |
| #33.0   | D            | T494D336(1)025A(2)   | 8.3                               | 6.0                              | 0.4                                |
| #33.0   | C            | T494C336(1)025A(2)   | 8.3                               | 10.0                             | 1.0                                |
| #47.0   | X            | T494X476(1)025A(2)   | 11.8                              | 6.0                              | 0.3                                |
| †47.0   | D            | T494D476(1)025A(2)   | 11.8                              | 10.0                             | 0.2                                |
| †68.0   | X            | T494X686M025A(2)     | 17.0                              | 8.0                              | 0.3                                |
| †68.0   | D            | T494D686M025A(2)     | 17.0                              | 10.0                             | 0.5                                |
| †100.0  | X            | T494X107M025A(2)     | 25.0                              | 8.0                              | 0.25                               |

(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.  
 (2) To complete KEMET Part Number, insert H, G, or T lead material designation as shown on page 27.  
 \*Extended Values  
 †6 Volt product equivalent to 6.3 volt product.  
 #Maximum Capacitance Change @ 125°C=+15%.  
 †Maximum Capacitance Change @ 125°C=+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.

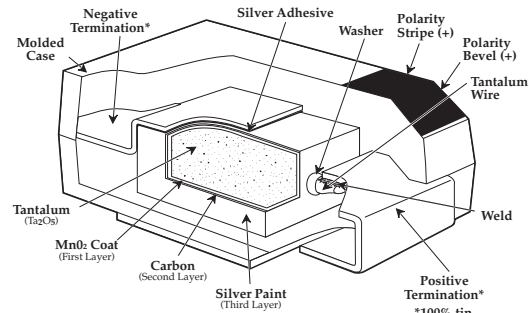
### T494 RATINGS & PART NUMBER REFERENCE

| Capacitance<br>µF   | Case<br>Size | KEMET<br>Part Number | DC<br>Leakage<br>µA @ 25°C<br>Max | DF %<br>@ +25°C<br>120 Hz<br>Max | ESR Ω<br>@ +25°C<br>100 kHz<br>Max |
|---|--------------|----------------------|-----------------------------------|----------------------------------|------------------------------------|
| <b>35 Volt Rating at +85°C (23 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 0.10  | A            | T494A104(1)035A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.15  | A            | T494A154(1)035A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 0.22  | A            | T494A224(1)035A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 0.33  | A            | T494A334(1)035A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 0.47  | B            | T494B474(1)035A(2)   | 0.5                               | 4.0                              | 2.5                                |
| 0.47  | A            | T494A474(1)035A(2)   | 0.5                               | 4.0                              | 4.0                                |
| 0.68  | B            | T494B684(1)035A(2)   | 0.5                               | 4.0                              | 2.5                                |
| 0.68  | A            | T494A684(1)035A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 1.0   | B            | T494B105(1)035A(2)   | 0.5                               | 4.0                              | 2.0                                |
| 1.0   | A            | T494A105(1)035A(2)   | 0.5                               | 4.0                              | 6.0                                |
| 1.5   | C            | T494C155(1)035A(2)   | 0.5                               | 6.0                              | 2.5                                |
| 1.5   | B            | T494B155(1)035A(2)   | 0.5                               | 6.0                              | 3.0                                |
| 2.2   | C            | T494C225(1)035A(2)   | 0.8                               | 6.0                              | 1.5                                |
| 2.2   | B            | T494B225(1)035A(2)   | 0.8                               | 6.0                              | 2.5                                |
| 3.3   | C            | T494C335(1)035A(2)   | 1.2                               | 6.0                              | 0.8                                |
| #3.3  | B            | T494B335(1)035A(2)   | 1.2                               | 6.0                              | 1.3                                |
| 4.7   | D            | T494D475(1)035A(2)   | 1.7                               | 6.0                              | 0.7                                |
| 4.7   | C            | T494C475(1)035A(2)   | 1.7                               | 6.0                              | 0.7                                |
| 6.8   | D            | T494D685(1)035A(2)   | 2.4                               | 6.0                              | 0.5                                |
| 6.8   | C            | T494C685(1)035A(2)   | 2.4                               | 6.0                              | 0.9                                |
| 10.0  | D            | T494D106(1)035A(2)   | 3.5                               | 6.0                              | 0.4                                |
| #10.0   | C            | T494C106M035A(2)     | 3.5                               | 6.0                              | 1.2                                |
| #10.0   | *V           | T494V106(1)035A(2)   | 3.5                               | 6.0                              | 0.8                                |
| 15.0  | X            | T494X156(1)035A(2)   | 5.3                               | 6.0                              | 0.30                               |
| 15.0  | D            | T494D156(1)035A(2)   | 5.3                               | 6.0                              | 0.35                               |
| #22.0   | X            | T494X226(1)035A(2)   | 7.7                               | 6.0                              | 0.3                                |
| #22.0   | D            | T494D226(1)035A(2)   | 7.7                               | 6.0                              | 0.4                                |
| #33.0   | D            | T494D336(1)035A(2)   | 11.6                              | 6.0                              | 0.6                                |
| #33.0   | X            | T494X336(1)035A(2)   | 11.6                              | 6.0                              | 0.6                                |
| †47.0   | X            | T494X476(1)035A(2)   | 16.5                              | 8.0                              | 0.5                                |
| †47.0   | E            | T494E476(1)035A(2)   | 16.5                              | 10.0                             | 0.3                                |
| <b>50 Volt Rating at +85°C (33 Volt Rating at +125°C)</b> |              |                      |                                   |                                  |                                    |
| 0.10  | A            | T494A104(1)050A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.15  | B            | T494B154(1)050A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.15  | A            | T494A154(1)050A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.22  | B            | T494B224(1)050A(2)   | 0.5                               | 4.0                              | 10.0                               |
| 0.33  | B            | T494B334(1)050A(2)   | 0.5                               | 4.0                              | 2.5                                |
| 0.47  | C            | T494C474(1)050A(2)   | 0.5                               | 4.0                              | 1.8                                |
| 0.47  | B            | T494B474(1)050A(2)   | 0.5                               | 4.0                              | 2.0                                |
| 0.68  | C            | T494C684(1)050A(2)   | 0.5                               | 4.0                              | 1.6                                |
| 0.68  | B            | T494B684(1)050A(2)   | 0.5                               | 4.0                              | 3.0                                |
| 1.0   | C            | T494C105(1)050A(2)   | 0.5                               | 4.0                              | 1.6                                |
| 1.0   | B            | T494B105(1)050A(2)   | 0.5                               | 6.0                              | 4.0                                |
| #1.0  | V            | T494V105M050A(2)     | 0.5                               | 4.0                              | 4.0                                |
| 1.5   | D            | T494D155(1)050A(2)   | 0.8                               | 6.0                              | 1.0                                |
| 1.5   | C            | T494C155(1)050A(2)   | 0.8                               | 6.0                              | 1.5                                |
| 2.2   | D            | T494D225(1)050A(2)   | 1.1                               | 6.0                              | 0.8                                |
| 2.2   | C            | T494C225(1)050A(2)   | 1.1                               | 6.0                              | 1.5                                |
| 3.3   | D            | T494D335(1)050A(2)   | 1.7                               | 6.0                              | 0.8                                |
| 4.7   | D            | T494D475(1)050A(2)   | 2.4                               | 6.0                              | 0.6                                |
| 6.8   | X            | T494X685(1)050A(2)   | 3.5                               | 6.0                              | 0.5                                |
| #6.8  | D            | T494D685(1)050A(2)   | 3.4                               | 6.0                              | 0.7                                |
| #10.0   | X            | T494X106M050A(2)     | 5.0                               | 6.0                              | 0.4                                |
| #10.0   | D            | T494D106(1)050A(2)   | 5.0                               | 6.0                              | 0.7                                |
| †15.0   | X            | T494X156(1)050A(2)   | 7.5                               | 6.0                              | 0.4                                |
| 22.0  | X            | T494X226(1)050A(2)   | 11.0                              | 10.0                             | 0.5                                |

### CAPACITOR MARKINGS T494 Series — All Case Sizes



### CONSTRUCTION



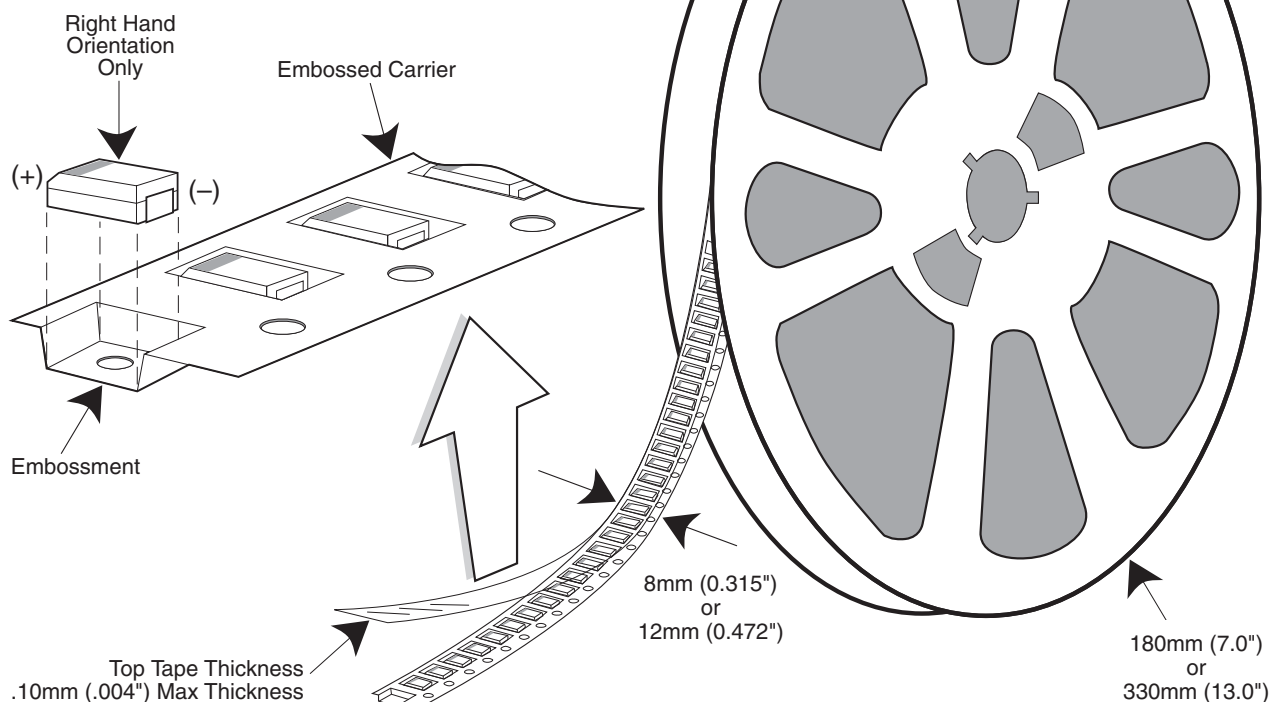
(1) To complete KEMET Part Number, insert M for ±20% tolerance or K for ±10% tolerance.  
 (2) To complete KEMET Part Number, insert H, G, or T lead material designation as shown on page 27.  
 \*Extended Values

\*\*6 Volt product equivalent to 6.3 volt product.  
 #Maximum Capacitance Change @ 125°C=+15%.  
 †Maximum Capacitance Change @ 125°C=+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.

## Tape & Reel Packaging

KEMET's Molded Tantalum and Aluminum Chip Capacitor families are packaged in 8 mm and 12 mm plastic tape on 7" and 13" reels, in accordance with EIA Standard 481-1: Taping of Surface Mount Components for Automatic Handling. This packaging system is compatible with all tape fed automatic pick and place systems.



**Labeling:** Bar code labeling (standard or custom) shall be on the side of the reel opposite the sprocket holes. Refer to EIA-556.

### QUANTITIES PACKAGED PER REEL

| Case Code |         | Tape Width-mm | 7" Reel* | 13" Reel |
|-----------|---------|---------------|----------|----------|
| KEMET     | EIA     |               |          |          |
| R         | 2012-12 | 8             | 2,500    | 10,000   |
| I         | 3216-10 | 8             | 3,000    | 12,000   |
| S         | 3216-12 | 8             | 2,500    | 10,000   |
| T         | 3528-12 | 8             | 2,500    | 10,000   |
| M         | 3528-15 | 8             | 2,000    | 8,000    |
| U         | 6032-15 | 12            | 1,000    | 5,000    |
| L         | 6032-19 | 12            | 1,000    | 5,000    |
| W         | 7343-15 | 12            | 1,000    | 3,000    |
| Z         | 7343-17 | 12            | 1,000    | 3,000    |
| V         | 7343-20 | 12            | 1,000    | 3,000    |
| A         | 3216-18 | 8             | 2,000    | 9,000    |
| B         | 3528-21 | 8             | 2,000    | 8,000    |
| C         | 6032-28 | 12            | 500      | 3,000    |
| D         | 7343-31 | 12            | 500      | 2,500    |
| Y         | 7343-40 | 12            | 500      | 2,000    |
| X         | 7343-43 | 12            | 500      | 2,000    |
| E         | 7260-38 | 12            | 500      | 2,000    |

\* No c-spec required for 7" reel packaging. C-7280 required for 13" reel packaging.

# TANTALUM, CERAMIC AND ALUMINUM CHIP CAPACITORS

## Packaging Information

### Performance Notes

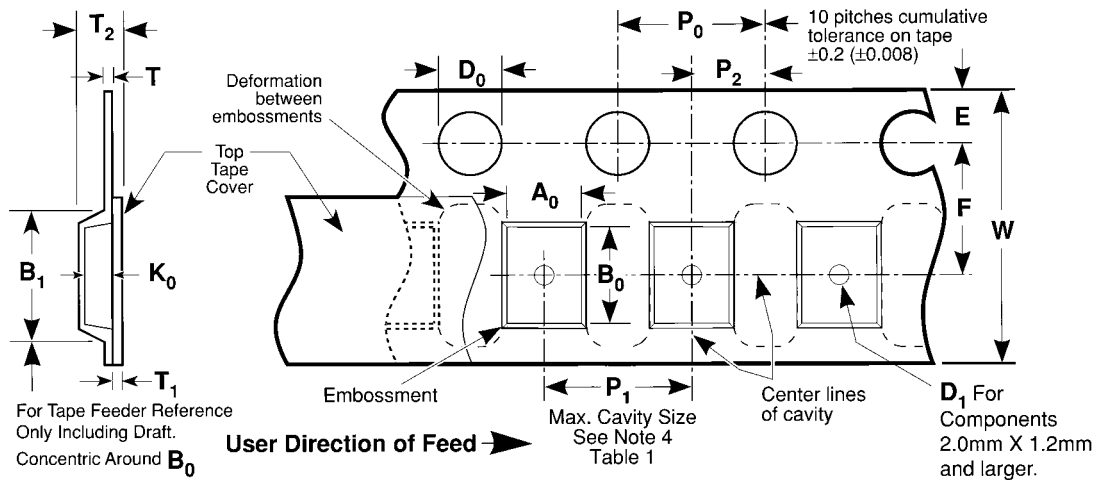
- Cover Tape Break Force:** 1.0 Kg Minimum.
- Cover Tape Peel Strength:** The total peel strength of the cover tape from the carrier tape shall be:

| Tape Width | Peel Strength                          |
|------------|--|
| 8 mm       | 0.1 Newton to 1.0 Newton (10g to 100g) |
| 12 mm      | 0.1 Newton to 1.3 Newton (10g to 130g) |

The direction of the pull shall be opposite the direction of the carrier tape travel. The pull angle of the carrier tape shall be 165° to 180° from the plane of the carrier tape. During peeling, the carrier and/or cover tape shall be pulled at a velocity of 300 ±10 mm/minute.

- Reel Sizes:** Molded tantalum capacitors are available on either 180 mm (7") reels (standard) or 330 mm (13") reels (with C-7280). Note that 13" reels are preferred.
- Labeling:** Bar code labeling (standard or custom) shall be on the side of the reel opposite the sprocket holes. Refer to EIA-556.

### Embossed Carrier Tape Configuration: Figure 1



**Table 1 — EMBOSSED TAPE DIMENSIONS (Metric will govern)**

| Constant Dimensions — Millimeters (Inches) |  |                               |                               |                             |                             |                    |                    |                              |  |
|--|--|-------------------------------|-------------------------------|-----------------------------|-----------------------------|--------------------|--------------------|------------------------------|--|
| Tape Size                                  | D <sub>0</sub>                               | E                             | P <sub>0</sub>                | P <sub>2</sub>              | T Max                       | T <sub>1</sub> Max |                    |                              |  |
| 8 mm and 12 mm                             | 1.5<br>+0.10 -0.0<br>(0.059<br>+0.004, -0.0) | 1.75 ±0.10<br>(0.069 ±0.004)  | 4.0 ±0.10<br>(0.157 ±0.004)   | 2.0 ±0.05<br>(0.079 ±0.002) | 0.600<br>(0.024)            | 0.100<br>(0.004)   |                    |                              |  |
| Variable Dimensions — Millimeters (Inches) |  |                               |                               |                             |                             |                    |                    |                              |  |
| Tape Size                                  | Pitch  | B <sub>1</sub> Max.<br>Note 1 | D <sub>1</sub> Min.<br>Note 2 | F                           | P <sub>1</sub>              | R Min.<br>Note 3   | T <sub>2</sub> Max | W                            | A <sub>0</sub> B <sub>0</sub> K <sub>0</sub><br>Note 4 |
| 8 mm                                       | Single<br>(4 mm)                             | 4.4<br>(0.173)                | 1.0<br>(0.039)                | 3.5 ±0.05<br>(0.138 ±0.002) | 4.0 ±0.10<br>(0.157 ±0.004) | 25.0<br>(0.984)    | 2.5<br>(0.098)     | 8.0 ±0.30<br>(.315 ±0.012)   |  |
| 12 mm                                      | Double<br>(8 mm)                             | 8.2<br>(0.323)                | 1.5<br>(0.059)                | 5.5 ±0.05<br>(0.217 ±0.002) | 8.0 ±0.10<br>(0.315 ±0.004) | 30.0<br>(1.181)    | 4.6<br>(0.181)     | 12.0 ±0.30<br>(0.472 ±0.012) |  |

### NOTES

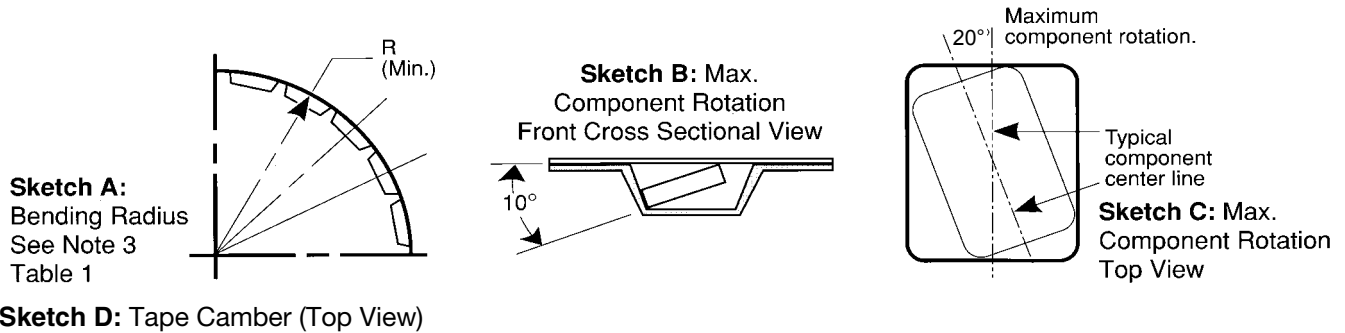
- B<sub>1</sub> dimension is a reference dimension for tape feeder clearance only.
- The embossment hole location shall be measured from the sprocket hole controlling the location of the embossment. Dimensions of embossment location and hole location shall be applied independent of each other.
- Tape with components shall pass around radius "R" without damage (see sketch A). The minimum trailer length (Fig. 2) may require additional length to provide R min. for 12 mm embossed tape for reels with hub diameters approaching N min. (Table 2)
- The cavity defined by A<sub>0</sub>, B<sub>0</sub>, and K<sub>0</sub> shall be configured to surround the part with sufficient clearance such that the chip does not protrude beyond the sealing plane of the cover tape, the chip can be removed from the cavity in a vertical direction without mechanical restriction, rotation of the chip is limited to 20 degrees maximum in all 3 planes, and lateral movement of the chip is restricted to 0.5 mm maximum in the pocket (not applicable to vertical clearance.)

# TANTALUM, CERAMIC AND ALUMINUM CHIP CAPACITORS

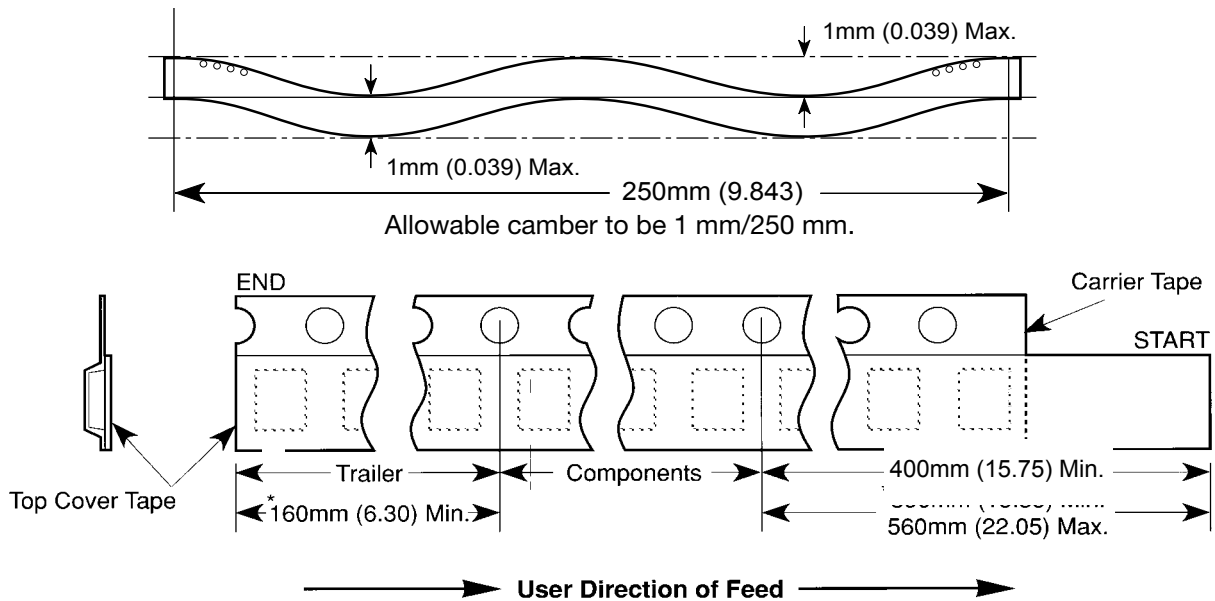


## Packaging Information

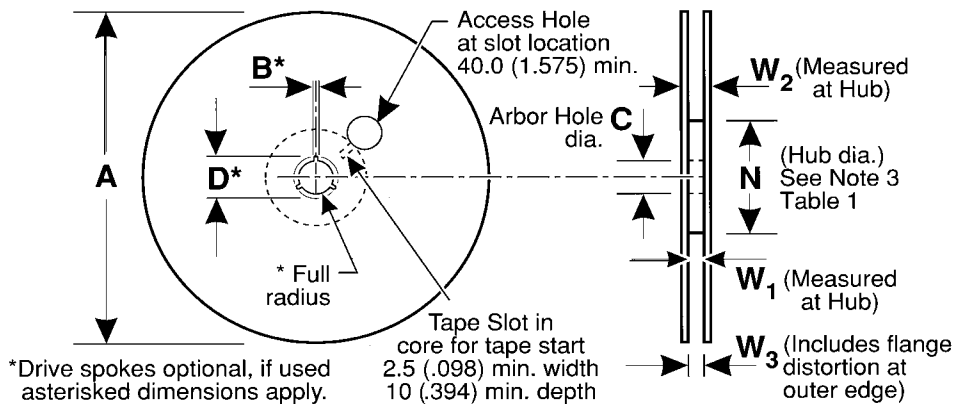
### Embossed Carrier Tape Configuration (cont.)



**Sketch D:** Tape Camber (Top View)



**Figure 2:** Tape Leader & Trailer Dimensions (Metric Dimensions Will Govern)



**Figure 3:** Reel Dimensions (Metric Dimensions will govern)

**Table 2 – REEL DIMENSIONS (Metric will govern)**

| Tape Size | A Max             | $B^*$ Min      | C                              | $D^*$ Min       | N Min                                       | $W_1$   | $W_2$ Max       | $W_3$                                      |
|-----------|-------------------|----------------|--------------------------------|-----------------|---|---|-----------------|--|
| 8 mm      | 330.0<br>(12.992) | 1.5<br>(0.059) | 13.0 ± 0.20<br>(0.512 ± 0.008) | 20.2<br>(0.795) | 50.0<br>(1.969)<br>See<br>Note 3<br>Table 1 | 8.4<br>+1.5, -0.0<br>(0.331<br>+0.059, -0.0)  | 14.4<br>(0.567) | 7.9 Min<br>(0.311)<br>10.9 Max<br>(0.429)  |
| 12 mm     | 330.0<br>(12.992) | 1.5<br>(0.059) | 13.0 ± 0.20<br>(0.512 ± 0.008) | 20.2<br>(0.795) | Table 1                                     | 12.4<br>+2.0, -0.0<br>(0.488<br>+0.078, -0.0) | 18.4<br>(0.724) | 11.9 Min<br>(0.469)<br>15.4 Max<br>(0.606) |