### T330 Series

KEMET T330 Series, polar-type, radial lead rectangular Precision Molded Tantalum (PMT) capacitors are primarily designed for applications that demand full use of the premium space available in printed circuitry and high density packaging. Compact, space saving T330 Series capacitors provide superior packing factor and space utilization compared with tubular units of the same microcoulomb (CV) rating.

T330 Series capacitors employ a rectangular sintered, dry tantalum anode, transfer molded in precision dies with a high impact resistant plastic having excellent electrical, physical, and moisture resistant properties. All cases utilize gold color plastic which permits laser marking with outstanding permanency and legibility. The polarity is indicated by a + sign permanently marked on the case. The radius on the two vertical edges at the positive end of B, C, and D Cases can be used as a sensing dimension for automatic insertion processes.

The location of the standoffs may serve a similar sensing function for the A Case. These standoffs, located in the base of all case sizes, provide vents for air circulation and also allow easy removal of flux residues from leadwire and circuit board solder joints.

T330 Series capacitors are highly reliable and exhibit performance characteristics typical of military test standards. They are available in capacitance values ranging from 0.1 to 220 microfarads in ±20, ±10, ±5% tolerance levels, and in working voltages from 6 to 50 volts. At 85°C the capacitors will operate continuously at full rated voltage. They are rated to 125°C when operated at 2/3 of nameplate voltage. In addition, they feature exceptionally low DC leakage and Dissipation Factor characteristics.

They are ideal for bypass, coupling, and timing applications in computers, military ordinance, industrial, entertainment, and consumer electronic equipment.

### T340 Series

The compact space saving T340 Series is transfer molded in precision dies with a high impact resistant plastic having excellent electrical, physical, and moisture resistant properties. The gold color plastic case utilized permits laser marking with outstanding permanency and legibility.

Marking is provided on the top of the case to allow visual inspection for proper polarity and placement after insertion. In addition, positive polarity identification is achieved by an easily recognized molded radius on the positive end of the case. This physical polarity identification is readily observed after capacitor placement as a further aid to the top marking in prevention of possible reverse insertion.

Standoffs, located in the base of all case sizes, provide vents for air circulation and also allow easy removal of flux residues from leadwire and circuit board solder joints. With very low impedance and ESR values, the T340 Series features exceptionally low DC leakage and DF characteristics. The T340 Series is available in standard ±20%; ±10%; ±5% (special order) capacitance tolerance.

T340 Series capacitors are highly reliable and exhibit performance characteristics typical of military test standards.

## PERFORMANCE CHARACTERISTICS

- CAPACITANCE/VOLTAGE RANGE:
  T330: 0.1-220µF, 6-50 Volts.
  T340: 0.1-330µF, 6-50 Volts.
- CAPACITANCE TOLERANCE: Available in standard EIA nominal values with ±20% tolerance standard, ±10% and ±5% available on special order.
- DISSIPATION FACTOR: Maximum DF limits are shown in corresponding series part number listing. See Application Notes Section, page 78.
- DC LEAKAGE CURRENT: Maximum leakage values at 25°C are shown in part number listings, pages 51, 52, 55, 56 and 57. See Application Notes Section, page 76.

**T330/T340 ESR (OHMS) at 100 kHz @ +25°C**
(The ESR values provided below are for reference only.
No warranty, as stated on page 3 and reincorporated here,is made as to
the accuracy of these values for any particular T330/T340 Series product.)

| Cap. µF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 25 Volt | 35 Volt | 50 Volt |
|---|---|---|---|---|---|---|---|
| 0.10 | | | | | | 26.0 | 26.0 |
| 0.15 | | | | | | 21.0 | 21.0 |
| 0.22 | | | | | | 17.0 | 17.0 |
| 0.33 | | | | | | 15.0 | 15.0 |
| 0.47 | | | | | | 13.0 | 13.0 |
| 0.68 | | | | | | 10.0 | 10.0 |
| 1.00 | | | | | | 8.0 | 8.0 |
| 1.50 | | | | | 8.0 | 6.0 | 5.0 |
| 2.20 | | | | 7.0 | 6.0 | 5.0 | 3.5 |
| 3.30 | | | 6.0 | 5.5 | 5.0 | 4.0 | 3.0 |
| 4.70 | | 8.0 | 5.0 | 4.5 | 4.0 | 3.0 | 2.5 |
| 6.80 | 8.0 | 6.0 | 4.0 | 3.6 | 3.1 | 2.5 | 2.0 |
| 10.0 | 6.0 | 5.0 | 3.2 | 2.9 | 2.5 | 2.0 | 1.6 |
| 15.0 | 5.0 | 3.7 | 2.5 | 2.3 | 2.0 | 1.6 | 1.2 |
| 22.0 | 3.7 | 2.7 | 2.0 | 1.8 | 1.5 | 1.3 | 1.0 |
| 33.0 | 3.0 | 2.1 | 1.6 | 1.4 | 1.2 | 1.0 | |
| 47.0 | 2.0 | 1.7 | 1.3 | 1.2 | 1.0 | 0.8 | |
| 68.0 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | | |
| 100.0 | 1.6 | 1.0 | 0.8 | 0.6 | | | |
| 150.0 | 0.9 | 0.8 | 0.6 | | | | |
| 220.0 | 0.9 | 0.6 | | | | | |
| 330.0 | 0.7 | | | | | | |

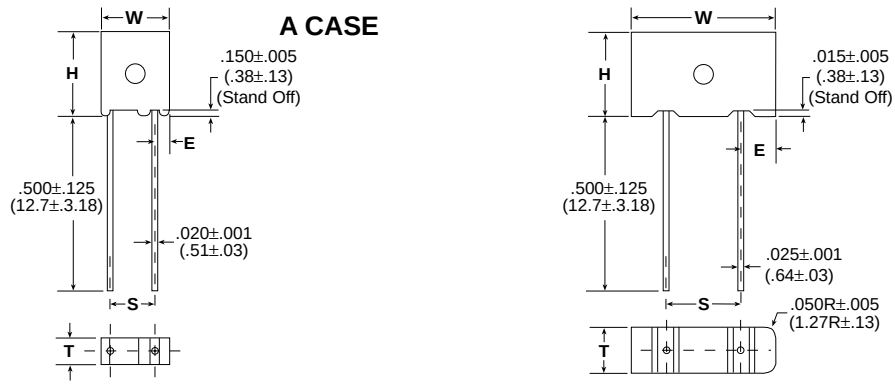
- RATED VOLTAGE; WORKING VOLTAGE; SURGE VOLTAGE; REVERSE VOLTAGE: See Application Notes Section, pages 76 & 77 for description.
- IMPEDANCE and ESR: See Application Notes Section, page 77 & 78 for additional information. Reference ESR values are shown in table below.
- AC RIPPLE VOLTAGE: Permissible AC ripple voltage is related to ESR of the capacitor and the power dissipation capabilities of a particular case size. Thermal capacities for the various case sizes have been determined and are listed in Table below. For additional description see page 78.

| Series | Case Size | Watts |
|---|---|---|
| T330/T340 | A | .09 |
| | B | .09 |
| | C | .100 |
| T330 | D | .125 |
| T340 only | D/F | .125 |
| | E | .180 |

**Maximum Power Dissipation: 25°C Ambient**

- ENVIRONMENTAL CONSIDERATIONS:
  A. Shock Test: MIL-STD-202, Method 213.
  B. Thermal Shock, MIL-STD-202, Method 107.
  C. Moisture Resistance: MIL-STD-202, Method 106.
  D. Solderability: MIL-STD-202, Method 208.
  For additional Environmental Test Information see pages 80, 81 and 82.
- LEAD MATERIAL: Solder coated steel core with copper ply per MIL-STD-1276.
- LEAD TAPE and REEL: Reeling per specification RS-468. See pages 71 and 73 for additional information.

## CAPACITOR OUTLINE DRAWINGS




*Note:*
*On the "B" case size the stand off appears only between the two leadss*

## DIMENSIONS — INCHES & (MILLIMETERS)

| CASE SIZE | H CASE HEIGHT | W CASE WIDTH | T CASE THICKNESS | E CASE TO WIRE | S LEAD SPACING |
|---|---|---|---|---|---|
| A | .345 ± .008 (8.76 ± .203) | .230 ± .005 (5.84 ± .127) | .105 ± .005 (2.67 ± .127) | .050 ± .010 (1.27 ± .25) | .125 ± .005 (3.18 ± .127) |
| B | .225 ± .015 (5.71 ± 0.38) | .285 ± .015 (7.24 ± 0.38) | .170 ± .015 (4.32 ± 0.38) | .042 ± .010 (1.07 ± .25) | .200 ± .005 (5.08 ± .127) |
| C | .325 ± .015 (8.26 ± 0.38) | .325 ± .015 (8.26 ± 0.38) | .170 ± .015 (4.32 ± 0.38) | .062 ± .010 (1.57 ± 0.25) | .200 ± .005 (5.08 ± .127) |
| D | .375 ± .015 (9.53 ± 0.38) | .600 ± .015 (15.24 ± 0.38) | .195 ± .015 (4.95 ± 0.38) | .200 ± .010 (5.08 ± 0.25) | .200 ± .005 (5.08 ± .127) |

## ORDERING INFORMATION

**T 330 B 104 M 035 A S***

**TANTALUM**

**SERIES**
Radial Lead
Precision Molded Polar
Solid Tantalum

**CASE SIZE**
A / B / C / D

**PICOFARAD CODE**
First two digits are significant figures.
Third digit is the number of zeros following.

**LEAD MATERIAL**
S — Standard (Solder-Coated Nickel)

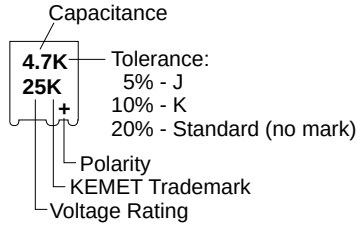
**FAILURE RATE LEVEL**
A — Not Applicable

**VOLTAGE RATING**

**CAP. TOLERANCE**
M — ±20% — Std.
K — ±10% — Std.
J — ±5% — Available on request

***Part Number Example: T330B104M035AS (14 digits – no spaces)**

## MARKING INFORMATION



# RATINGS & PART NUMBER REFERENCE

## A CASE

| CAPACITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C** | | | | |
| 18.0 | A | T330A186(1)006AS | 1 | 6 |
| **22.0** | **A** | **T330A226(1)006AS** | **1** | **6** |
| **10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C** | | | | |
| **10.0** | **A** | **T330A106(1)010AS** | **1** | **6** |
| 12.0 | A | T330A126(1)010AS | 1 | 6 |
| 15.0 | A | T330A156(1)010AS | 1 | 6 |
| **15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C** | | | | |
| 8.2 | A | T330A825(1)015AS | 1 | 6 |
| **20 VOLT RATING AT 85°C — 13 VOLT RATING AT 125°C** | | | | |
| 5.6 | A | T330A565(1)020AS | 1 | 6 |
| **6.8** | **A** | **T330A685(1)020AS** | **1** | **6** |
| **25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C** | | | | |
| 3.3 | A | T330A335(1)025AS | 1 | 4 |
| 3.9 | A | T330A395(1)025AS | 1 | 4 |
| **4.7** | **A** | **T330A475(1)025AS** | **1** | |
| **35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C** | | | | |
| 0.10 | A | T330A104(1)035AS | 1 | 3 |
| 0.12 | A | T330A124(1)035AS | 1 | 3 |
| 0.15 | A | T330A154(1)035AS | 1 | 3 |
| 0.18 | A | T330A184(1)035AS | 1 | 3 |
| 0.22 | A | T330A224(1)035AS | 1 | 3 |
| 0.27 | A | T330A274(1)035AS | 1 | 3 |
| 0.33 | A | T330A334(1)035AS | 1 | 3 |

| CAPACITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C** | | | | |
| 0.39 | A | T330A394(1)035AS | 1 | 3 |
| 0.47 | A | T330A474(1)035AS | 1 | 3 |
| 0.56 | A | T330A564(1)035AS | 1 | 3 |
| 0.68 | A | T330A684(1)035AS | 1 | 3 |
| 0.82 | A | T330A824(1)035AS | 1 | 3 |
| **1.0** | **A** | **T330A105(1)035AS** | **1** | **3** |
| 1.2 | A | T330A125(1)035AS | 1 | 4 |
| 1.5 | A | T330A155(1)035AS | 1 | 4 |
| 1.8 | A | T330A185(1)035AS | 1 | 4 |
| 2.2 | A | T330A225(1)035AS | 1 | 4 |
| **2.7** | **A** | **T330A275(1)035AS** | **1** | **4** |
| **50 VOLT RATING AT 85°C — 33 VOLT RATING AT 125°C** | | | | |
| 0.10 | A | T330A104(1)050AS | 1 | 3 |
| 0.12 | A | T330A124(1)050AS | 1 | 3 |
| 0.15 | A | T330A154(1)050AS | 1 | 3 |
| 0.18 | A | T330A184(1)050AS | 1 | 3 |
| 0.22 | A | T330A224(1)050AS | 1 | 3 |
| 0.27 | A | T330A274(1)050AS | 1 | 3 |
| 0.33 | A | T330A334(1)050AS | 1 | 3 |
| 0.39 | A | T330A394(1)050AS | 1 | 3 |
| 0.47 | A | T330A474(1)050AS | 1 | 3 |
| 0.56 | A | T330A564(1)050AS | 1 | 3 |
| 0.68 | A | T330A684(1)050AS | 1 | 3 |
| 0.82 | A | T330A824(1)050AS | 1 | 4 |
| 1.0 | A | T330A105(1)050AS | 1 | 4 |
| 1.2 | A | T330A125(1)050AS | 1 | 4 |
| 1.5 | A | T330A155(1)050AS | 1 | 4 |

## B, C & D CASES

| CAPACITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C** | | | | |
| 10.0 | B | T330B106(1)006AS | 1 | 6 |
| 12.0 | B | T330B126(1)006AS | 1 | 6 |
| 15.0 | B | T330B156(1)006AS | 1 | 6 |
| 18.0 | B | T330B186(1)006AS | 1 | 6 |
| 22.0 | B | T330B226(1)006AS | 1 | 6 |
| 27.0 | C | T330C276(1)006AS | 1 | 6 |
| 33.0 | C | T330C336(1)006AS | 1 | 6 |
| 39.0 | C | T330C396(1)006AS | 1 | 6 |
| 47.0 | C | T330C476(1)006AS | 2 | 6 |
| 56.0 | C | T330C566(1)006AS | 5 | 6 |
| 68.0 | C | T330C686(1)006AS | 5 | 6 |
| 82.0 | D | T330D826(1)006AS | 5 | 6 |
| 100.0 | D | T330D107(1)006AS | 5 | 6 |
| 120.0 | D | T330D127(1)006AS | 5 | 6 |
| 150.0 | D | T330D157(1)006AS | 5 | 6 |
| 180.0 | D | T330D187(1)006AS | 10 | 6 |
| 220.0 | D | T330D227(1)006AS | 10 | 8 |
| **10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C** | | | | |
| 5.6 | B | T330B565(1)010AS | 1 | 6 |
| 6.8 | B | T330B685(1)010AS | 1 | 6 |
| 8.2 | B | T330B825(1)010AS | 1 | 6 |
| 10.0 | B | T330B106(1)010AS | 1 | 6 |
| 12.0 | B | T330B126(1)010AS | 1 | 6 |
| 15.0 | B | T330B156(1)010AS | 1 | 6 |
| 18.0 | C | T330C186(1)010AS | 1 | 6 |
| 22.0 | C | T330C226(1)010AS | 2 | 6 |
| 27.0 | C | T330C276(1)010AS | 2 | 6 |

| CAPACITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C** | | | | |
| 33.0 | C | T330C336(1)010AS | 2 | 6 |
| 39.0 | C | T330C396(1)010AS | 5 | 6 |
| 47.0 | D | T330D476(1)010AS | 5 | 6 |
| 56.0 | D | T330D566(1)010AS | 5 | 6 |
| 68.0 | D | T330D686(1)010AS | 5 | 6 |
| 82.0 | D | T330D826(1)010AS | 5 | 6 |
| 100.0 | D | T330D107(1)010AS | 10 | 6 |
| 120.0 | D | T330D127(1)010AS | 10 | 6 |
| 150.0 | D | T330D157(1)010AS | 10 | 6 |
| **15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C** | | | | |
| 3.9 | B | T330B395(1)015AS | 1 | 6 |
| 4.7 | B | T330B475(1)015AS | 1 | 6 |
| 5.6 | B | T330B565(1)015AS | 1 | 6 |
| 6.8 | B | T330B685(1)015AS | 1 | 6 |
| 8.2 | B | T330B825(1)015AS | 1 | 6 |
| 10.0 | C | T330C106(1)015AS | 1 | 6 |
| 12.0 | C | T330C126(1)015AS | 1 | 6 |
| 15.0 | C | T330C156(1)015AS | 2 | 6 |
| 18.0 | C | T330C186(1)015AS | 5 | 6 |
| 22.0 | C | T330C226(1)015AS | 5 | 6 |
| 27.0 | C | T330C276(1)015AS | 5 | 6 |
| 33.0 | C | T330C336(1)015AS | 5 | 6 |
| 39.0 | D | T330D396(1)015AS | 10 | 6 |
| 47.0 | D | T330D476(1)015AS | 10 | 6 |
| 56.0 | D | T330D566(1)015AS | 10 | 6 |
| 68.0 | D | T330D686(1)015AS | 10 | 6 |
| 82.0 | D | T330D826(1)015AS | 10 | 6 |

(1) To complete Part Number insert Capacitance Tolerance Symbol in the 9th character, M — ±20%, K — ±10%, J — ±5%.
**Bold face** lines indicate popular part types and values.
Higher voltage and better capacitance tolerance product may be substituted for an order within the same case size at KEMET'S option.

### B, C & D CASES (Cont'd)

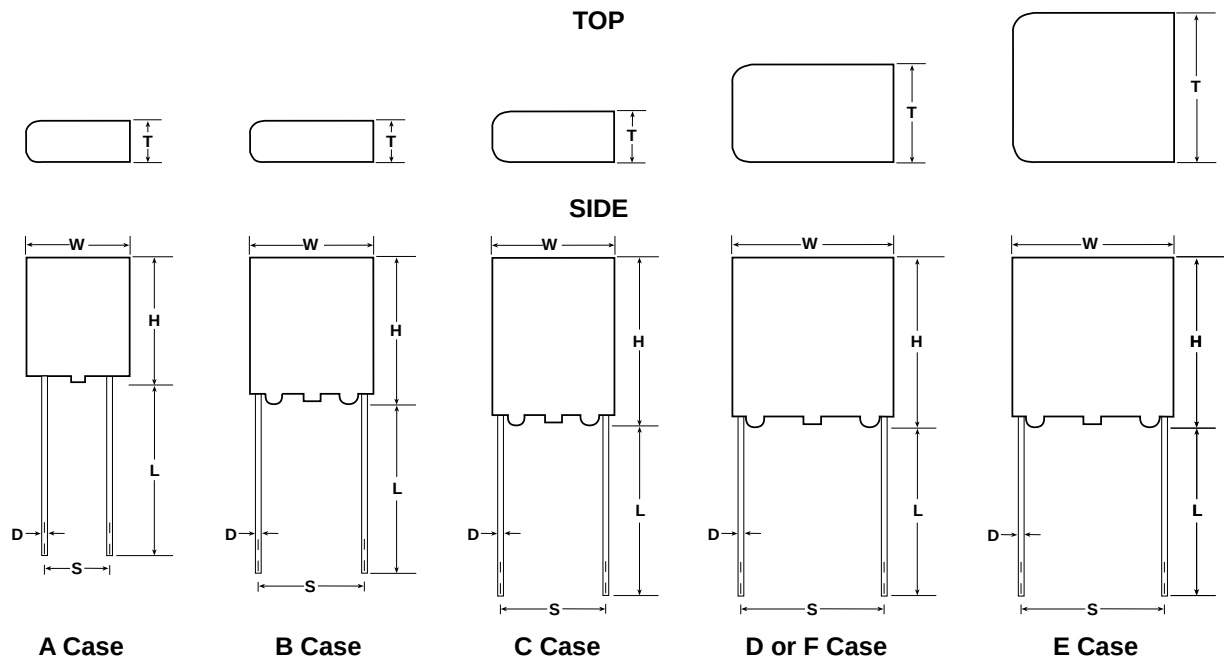
| CAPAC-ITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C** | | | | |
| 2.7 | B | T330B275(1)025AS | 1 | 6 |
| 3.3 | B | T330B335(1)025AS | 1 | 6 |
| 3.9 | B | T330B395(1)025AS | 1 | 6 |
| 4.7 | B | T330B475(1)025AS | 1 | 6 |
| 5.6 | C | T330C565(1)025AS | 1 | 6 |
| 6.8 | C | T330C685(1)025AS | 1 | 6 |
| 8.2 | C | T330C825(1)025AS | 1 | 6 |
| 10.0 | C | T330C106(1)025AS | 1 | 6 |
| 12.0 | C | T330C126(1)025AS | 1 | 6 |
| 15.0 | C | T330C156(1)025AS | 2 | 6 |
| 18.0 | D | T330D186(1)025AS | 5 | 6 |
| 22.0 | D | T330D226(1)025AS | 5 | 6 |
| 27.0 | D | T330D276(1)025AS | 5 | 6 |
| 33.0 | D | T330D336(1)025AS | 5 | 6 |
| 39.0 | D | T330D396(1)025AS | 10 | 6 |
| **47.0** | **D** | **T330D476(1)025AS** | **10** | **6** |
| **35 VOLT RATING AT 85°C—23 VOLT RATING AT 125°C** | | | | |
| 0.10 | B | T330B104(1)035AS | 1 | 6 |
| 0.12 | B | T330B124(1)035AS | 1 | 6 |
| 0.15 | B | T330B154(1)035AS | 1 | 6 |
| 0.18 | B | T330B184(1)035AS | 1 | 6 |
| 0.22 | B | T330B224(1)035AS | 1 | 6 |
| 0.27 | B | T330B274(1)035AS | 1 | 6 |
| 0.33 | B | T330B334(1)035AS | 1 | 6 |
| 0.39 | B | T330B394(1)035AS | 1 | 6 |
| 0.47 | B | T330B474(1)035AS | 1 | 6 |
| 0.56 | B | T330B564(1)035AS | 1 | 6 |
| 0.68 | B | T330B684(1)035AS | 1 | 6 |
| 0.82 | B | T330B824(1)035AS | 1 | 6 |
| 1.0 | B | T330B105(1)035AS | 1 | 6 |
| 1.2 | B | T330B125(1)035AS | 1 | 6 |
| 1.5 | B | T330B155(1)035AS | 1 | 6 |
| 1.8 | B | T330B185(1)035AS | 1 | 6 |
| 2.2 | B | T330B225(1)035AS | 1 | 6 |
| 2.7 | B | T330B275(1)035AS | 1 | 6 |
| 3.3 | B | T330B335(1)035AS | 1 | 6 |
| 3.9 | C | T330C395(1)035AS | 1 | 6 |
| 4.7 | C | T330C475(1)035AS | 1 | 6 |
| 5.6 | C | T330C565(1)035AS | 1 | 6 |

| CAPAC-ITANCE µF | CASE SIZE | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120Hz |
|---|---|---|---|---|
| **35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C** | | | | |
| 6.8 | C | T330C685(1)035AS | 2 | 6 |
| 8.2 | C | T330C825(1)035AS | 5 | 6 |
| **10.0** | **C** | **T330C106(1)035AS** | **5** | **6** |
| 12.0 | D | T330D126(1)035AS | 5 | 6 |
| 15.0 | D | T330D156(1)035AS | 5 | 6 |
| 18.0 | D | T330D186(1)035AS | 10 | 6 |
| 22.0 | D | T330D226(1)035AS | 10 | 6 |
| 27.0 | D | T330D276(1)035AS | 10 | 6 |
| 33.0 | D | T330D336(1)035AS | 10 | 6 |
| **50 VOLT RATING AT 85°C—33 VOLT RATING AT 125°C** | | | | |
| 0.10 | B | T330B104(1)050AS | 1 | 6 |
| 0.12 | B | T330B124(1)050AS | 1 | 6 |
| 0.15 | B | T330B154(1)050AS | 1 | 6 |
| 0.18 | B | T330B184(1)050AS | 1 | 6 |
| 0.22 | B | T330B224(1)050AS | 1 | 6 |
| 0.27 | B | T330B274(1)050AS | 1 | 6 |
| 0.33 | B | T330B334(1)050AS | 1 | 6 |
| 0.39 | B | T330B394(1)050AS | 1 | 6 |
| 0.47 | B | T330B474(1)050AS | 1 | 6 |
| 0.56 | B | T330B564(1)050AS | 1 | 6 |
| 0.68 | B | T330B684(1)050AS | 1 | 6 |
| 0.82 | B | T330B824(1)050AS | 1 | 6 |
| 1.0 | B | T330B105(1)050AS | 1 | 6 |
| 1.2 | B | T330B125(1)050AS | 1 | 6 |
| 1.5 | B | T330B155(1)050AS | 1 | 6 |
| 1.8 | B | T330B185(1)050AS | 1 | 6 |
| 2.2 | B | T330B225(1)050AS | 1 | 6 |
| 2.7 | C | T330C275(1)050AS | 1 | 6 |
| 3.3 | C | T330C335(1)050AS | 2 | 6 |
| 3.9 | C | T330C395(1)050AS | 5 | 6 |
| 4.7 | C | T330C475(1)050AS | 5 | 6 |
| 5.6 | C | T330C565(1)050AS | 5 | 6 |
| 6.8 | D | T330D685(1)050AS | 5 | 6 |
| 8.2 | D | T330D825(1)050AS | 5 | 6 |
| 10.0 | D | T330D106(1)050AS | 5 | 6 |
| 12.0 | D | T330D126(1)050AS | 5 | 6 |
| 15.0 | D | T330D156(1)050AS | 10 | 6 |
| 18.0 | D | T330D186(1)050AS | 10 | 6 |

(1) To complete Part Number insert Capacitance Tolerance Symbol in the 9th character, M — ±20%, K — ±10%, J — ±5%.
**Bold face** lines indicate popular part types and values.
Higher voltage and better capacitance tolerance product may be substituted for an order within the same case size at KEMET'S option.

**Effective September 30, 2005, the KEMET T340 Series is RoHS compliant.**

## CAPACITOR OUTLINE DRAWINGS




*F case size is the same as D, but with .200" (5.0 mm) lead spacing. Specify T340F when ordering this spacing.*

## DIMENSIONS — INCHES & MILLIMETERS

| CASE SIZE | H** (MAX) H | | W (MAX) W | | T (MAX) T | | LEAD SPACING S | | LEAD LENGTH L | | LEAD DIAMETER D | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Inches | mm | Inches | mm | inches | mm | Inches ±.020 | mm ±.5 | Inches ±.078 | mm ±2.0 | Inches ±.001 | mm ±.03 |
| A | **.287** | 7.3 | **.185** | 4.7 | **.165** | 4.2 | **.100** | 2.5 | **.600** | 15.0 | **.020** | 0.50 |
| B | **.327** | 8.3 | **.283** | 7.2 | **.157** | 4.0 | **.200** | 5.0 | **.600** | 15.0 | **.020** | 0.50 |
| C | **.413** | 10.5 | **.287** | 7.3 | **.169** | 4.3 | **.200** | 5.0 | **.600** | 15.0 | **.020** | 0.50 |
| D | **.413** | 10.5 | **.484** | 12.3 | **.287** | 7.3 | **.400** | 10.0 | **.600** | 15.0 | **.025** | 0.64 |
| E | **.413** | 10.5 | **.484** | 12.3 | **.484** | 12.3 | **.400** | 10.0 | **.600** | 15.0 | **.025** | 0.64 |
| F | **.413** | 10.5 | **.484** | 12.3 | **.287** | 7.3 | **.200** | 5.0 | **.600** | 15.0 | **.025** | 0.64 |

**Includes Standoff Height of .015 ± .005" (.38 ± .13 mm) for All Case Sizes.

## ORDERING INFORMATION

**T 340 A 105 M 035 A S***

**TANTALUM**

**SERIES**
Radial Lead
Precision Molded Polar
Solid Tantalum

**CASE SIZE**
A / B / C / D / E / F

**PICOFARAD CODE**
First two digits are significant figures.
Third digit is the number of zeros following.

**LEAD MATERIAL**
S — Standard (solder-coated copperweld)
T – 100% tin

**FAILURE RATE LEVEL**
A — Not Applicable

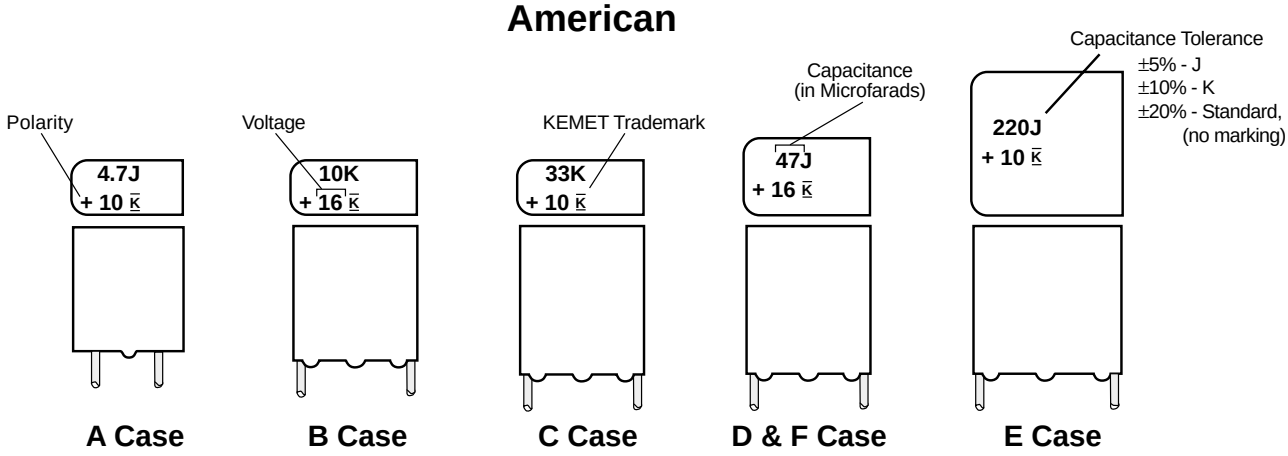
**VOLTAGE RATING**

**CAPACITANCE TOLERANCE**
M — ±20% — Std.
K — ±10%
J — ±5%
} Available on request

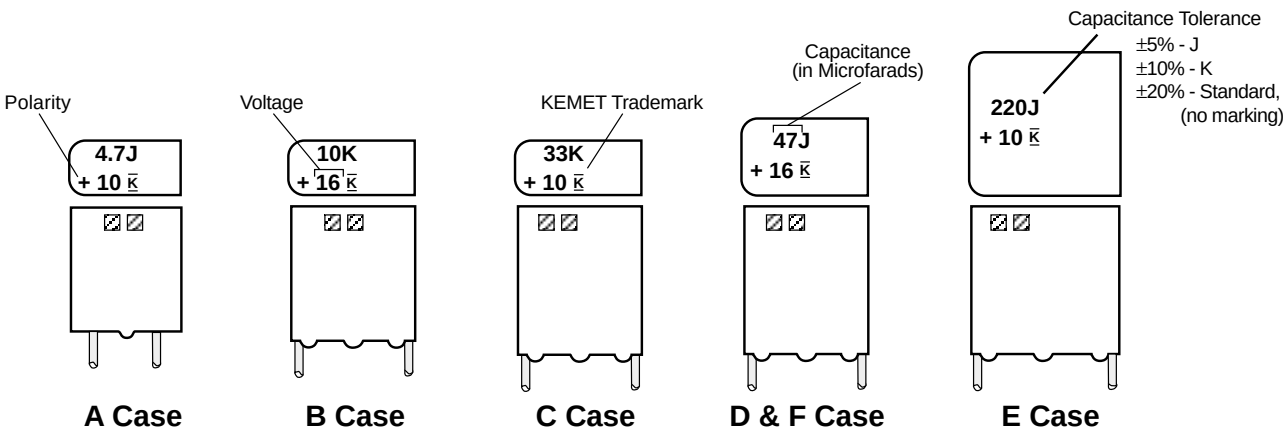
***Part Number Example: T340A105M035AS (14 digits – no spaces)**

## MARKING INFORMATION

### American




### European




**□ □ = DIN. Specification Date Code**

Insert Date Code as follows:

□ 1st digit - represents year

| | |
|---|---|
| L - 2000 | Q- 2005 |
| M - 2001 | R - 2006 |
| N - 2002 | S - 2007 |
| O - 2003 | T - 2008 |
| P - 2004 | U - 2009 |

□ 2nd digit - represents month

1 - 9 for January - September
O for October
N for November
D for December


KEMET Electronics Corporation, P.O. Box 5928, Greenville, S.C. 29606 (864) 963-6300

## RATINGS & PART NUMBER REFERENCE

| CAPACI-ITANCE µF | CASE SIZE | KEMET PART NUMBER | MAX. DC LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MAX. IMPEDANCE Ω@ 10 kHz |
|---|---|---|---|---|---|
| **3 VOLT RATING AT 85°C — 2 VOLT AT 125°C** | | | | | |
| 10.0 | A | T340A106(1)003AS | 1.0 | 6 | 6.0 |
| 15.0 | A | T340A156(1)003AS | 1.0 | 6 | 3.2 |
| 33.0 | B | T340B336(1)003AS | 1.5 | 6 | 2.1 |
| 47.0 | B | T340B476(1)003AS | 3.0 | 6 | 1.8 |
| 68.0 | C | T340C686(1)003AS | 4.0 | 6 | 1.5 |
| 100.0 | C | T340C107(1)003AS | 5.0 | 6 | 1.2 |
| **6/6.3 VOLT RATING AT 85°C — 4 VOLT AT 125°C** | | | | | |
| 6.8 | A | T340A685(1)006AS | 1.0 | 6 | 6.0 |
| 10.0 | B | T340B106(1)006AS | 1.0 | 6 | |
| 12.0 | B | T340B126(1)006AS | 1.0 | 6 | |
| 15.0 | B | T340B156(1)006AS | 1.0 | 6 | |
| 18.0 | B | T340B186(1)006AS | 1.0 | 6 | |
| 22.0 | B | T340B226(1)006AS | 2.5 | 6 | 2.1 |
| 27.0 | C | T340C276(1)006AS | 2.5 | 6 | |
| 33.0 | C | T340C336(1)006AS | 2.5 | 6 | |
| 39.0 | C | T340C396(1)006AS | 2.5 | 6 | |
| **47.0** | **C** | **T340C476(1)006AS** | **3.0** | **6** | **1.5** |
| 56.0 | C | T340C566(1)006AS | 5.0 | 6 | |
| 68.0 | C | T340C686(1)006AS | 5.0 | 6 | |
| 82.0 | D/F | T340(2)826(1)006AS | 5.0 | 6 | |
| 100.0 | D/F | T340(2)107(1)006AS | 5.0 | 6 | |
| 120.0 | D/F | T340(2)127(1)006AS | 5.0 | 6 | |
| 150.0 | D/F | T340(2)157(1)006AS | 8.0 | 6 | 0.8 |
| 180.0 | D/F | T340(2)187(1)006AS | 10.0 | 6 | |
| 220.0 | D/F | T340(2)227(1)006AS | 10.0 | 6 | |
| 330.0 | E | T340E337(1)006AS | 10.0 | 8 | 0.5 |
| **10 VOLT RATING AT 85°C — 6 VOLT AT 125°C** | | | | | |
| **4.7** | **A** | **T340A475(1)010AS** | **1.0** | **6** | **7.5** |
| 5.6 | B | T340B565(1)010AS | 1.0 | 6 | |
| 6.8 | B | T340B685(1)010AS | 1.0 | 6 | |
| 8.2 | B | T340B825(1)010AS | 1.0 | 6 | |
| 10.0 | B | T340B106(1)010AS | 1.0 | 6 | |
| 12.0 | B | T340B126(1)010AS | 1.0 | 6 | |
| 15.0 | B | T340B156(1)010AS | 3.0 | 6 | 2.5 |
| 18.0 | C | T340C186(1)010AS | 3.0 | 6 | |
| 22.0 | C | T340C226(1)010AS | 3.0 | 6 | |
| 27.0 | C | T340C276(1)010AS | 3.0 | 6 | |
| **33.0** | **C** | **T340C336(1)010AS** | **5.0** | **6** | **1.7** |
| 39.0 | C | T340C396(1)010AS | 5.0 | 6 | |
| 47.0 | D/F | T340(2)476(1)010AS | 5.0 | 6 | |
| 56.0 | D/F | T340(2)566(1)010AS | 5.0 | 6 | |
| 68.0 | D/F | T340(2)686(1)010AS | 5.0 | 6 | |
| 82.0 | D/F | T340(2)826(1)010AS | 8.0 | 6 | |
| **100.0** | **D/F** | **T340(2)107(1)010AS** | **10.0** | **6** | 1.0 |
| 120.0 | D/F | T340(2)127(1)010AS | 10.0 | 6 | |
| 150.0 | D/F | T340(2)157(1)010AS | 10.0 | 6 | |
| 220.0 | E | T340E227(1)010AS | 10.0 | 6 | 0.5 |
| **15/16 VOLT RATING AT 85°C — 10 VOLT AT 125°C** | | | | | |
| **3.3** | **A** | **T340A335(1)015AS** | **1.0** | **6** | **9.0** |
| 3.9 | B | T340B395(1)015AS | 1.0 | 6 | |
| 4.7 | B | T340B475(1)015AS | 1.0 | 6 | |
| 5.6 | B | T340B565(1)015AS | 1.0 | 6 | |
| 6.8 | B | T340B685(1)015AS | 1.0 | 6 | |
| 8.2 | B | T340B825(1)015AS | 1.0 | 6 | |
| **10.0** | **B** | **T340B106(1)015AS** | **3.0** | **6** | **3.2** |

(1) To complete KEMET Part Number, insert M — ±20%, K — ±10%, or J — ±5% for capacitance tolerance as shown in T340 ordering information.
(2) To complete KEMET Part Number, insert letter "D" for 10.0 mm (.394) lead spacing or letter "F" for 5.0 mm (.197) lead spacing. See page 53 for outline drawings.
**Bold face** lines indicate popular part types and values.
Higher voltage and better capacitance tolerance product may be substituted for an order within the same case size at KEMET'S option.

## RATINGS & PART NUMBER REFERENCE

| CAPAC-ITANCE µF | CASE SIZE | KEMET PART NUMBER | MAX. DC LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MAX IMPEDANCE Ω@ 10 kHz |
|---|---|---|---|---|---|
| **15/16 VOLT RATING AT 85°C — 10 VOLT AT 125°C (Cont'd)** | | | | | |
| 12.0 | C | T340C126(1)015AS | 3.0 | 6 | |
| 15.0 | C | T340C156(1)015AS | 3.5 | 6 | 2.5 |
| 18.0 | C | T340C186(1)015AS | 4.0 | 6 | |
| **22.0** | **C** | **T340C226(1)015AS** | **4.0** | **6** | **2.1** |
| 27.0 | C | T340C276(1)015AS | 5.0 | 6 | |
| 33.0 | C | T340C336(1)015AS | 5.0 | 6 | |
| 39.0 | D/F | T340(2)396(1)015AS | 7.0 | 6 | |
| **47.0** | **D/F** | T340(2)476(1)015AS | **7.0** | **6** | **1.3** |
| 56.0 | D/F | T340(2)566(1)015AS | 8.0 | 6 | |
| **68.0** | **D/F** | **T340(2)686(1)015AS** | **9.0** | **6** | **1.1** |
| 82.0 | D/F | T340(2)826(1)015AS | 10.0 | 6 | |
| 100.0 | E | T340E107(1)015AS | 10.0 | 6 | 0.8 |
| **150.0** | **E** | **T340E157(1)015AS** | **10.0** | **6** | **0.6** |
| **20 VOLT RATING AT 85°C — 13 VOLT AT 125°C** | | | | | |
| 2.2 | A | T340A225(1)020AS | 1.0 | 6 | 12.0 |
| 3.3 | B | T340B335(1)020AS | 1.0 | 6 | 8.0 |
| 4.7 | B | T340B475(1)020AS | 1.5 | 6 | 5.5 |
| 6.8 | B | T340B685(1)020AS | 2.5 | 6 | 4.2 |
| 15.0 | C | T340C156(1)020AS | 5.0 | 6 | 2.5 |
| 47.0 | D | T340D476(1)020AS | 9.0 | 6 | 1.3 |
| 100.0 | E | T340E107(1)020AS | 10.0 | 6 | 0.8 |
| **25 VOLT RATING AT 85°C — 16 VOLT AT 125°C** | | | | | |
| **1.5** | **A** | **T340A155(1)025AS** | **1.0** | **6** | **17.0** |
| 2.7 | B | T340B275(1)025AS | 1.0 | 6 | |
| 3.3 | B | T340B335(1)025AS | 1.0 | 6 | |
| 3.9 | B | T340B395(1)025AS | 1.0 | 6 | |
| 4.7 | B | T340B475(1)025AS | 2.0 | 6 | 5.5 |
| 5.6 | C | T340C565(1)025AS | 2.0 | 6 | |
| 6.8 | C | T340C685(1)025AS | 3.0 | 6 | 4.2 |
| 8.2 | C | T340C825(1)025AS | 3.0 | 6 | |
| **10.0** | **C** | **T340C106(1)025AS** | **3.5** | **6** | **3.0** |
| 12.0 | C | T340C126(1)025AS | 3.5 | 6 | |
| 15.0 | C | T340C156(1)025AS | 4.0 | 6 | |
| 18.0 | D/F | T340(2)186(1)025AS | 5.0 | 6 | |
| 22.0 | D/F | T340(2)226(1)025AS | 5.5 | 6 | 2.0 |
| 27.0 | D/F | T340(2)276(1)025AS | 7.0 | 6 | |
| **33.0** | **D/F** | **T340(2)336(1)025AS** | **8.0** | **6** | **1.5** |
| 39.0 | D/F | T340(2)396(1)025AS | 10.0 | 6 | |
| 47.0 | D/E/F | T340(2)476(1)025AS | 10.0 | 6 | 1.3 |
| 68.0 | E | T340E686(1)025AS | 10.0 | 6 | 0.9 |
| **35 VOLT RATING AT 85°C — 23 VOLT AT 125°C** | | | | | |
| 0.1 | A | T340A104(1)035AS | 1.0 | 6 | 220.0 |
| 0.15 | A | T340A154(1)035AS | 1.0 | 6 | 150.0 |
| 0.22 | A | T340A224(1)035AS | 1.0 | 6 | 100.0 |
| 0.33 | A | T340A334(1)035AS | 1.0 | 6 | 75.0 |
| 0.47 | A | T340A474(1)035AS | 1.0 | 6 | 50.0 |
| 0.68 | A | T340A684(1)035AS | 1.0 | 6 | 36.0 |
| **1.0** | **A** | **T340A105(1)035AS** | **1.0** | **6** | **25.0** |
| 1.2 | B | T340B125(1)035AS | 1.0 | 6 | 15.0 |
| 1.5 | B | T340B155(1)035AS | 1.0 | 6 | |
| 1.8 | B | T340B185(1)035AS | 1.0 | 6 | |
| **2.2** | **B** | **T340B225(1)035AS** | **1.0** | **6** | **11.0** |
| 2.7 | B | T340B275(1)035AS | 1.0 | 6 | |
| 3.3 | B/C | T340(2)335(1)035AS | 1.0 | 6 | 7.5 |

(1) To complete KEMET Part Number, insert M — ±20%, K — ±10%, or J — ±5% for capacitance tolerance as shown in T340 ordering information.
(2) To complete KEMET Part Number, insert letter "C" for 5.0 mm (.197") lead spacing, "D" for 10.0 mm (.394") lead spacing, "E" for 10.0 mm (.394") lead spacing or "F" for 5.0 mm (.197") lead spacing. See page 53 for outline drawings.
**Bold face** lines indicate popular part types and values.
Higher voltage and better capacitance tolerance product may be substituted for an order within the same case size at KEMET'S option.

## RATINGS & PART NUMBER REFERENCE

| CAPACI-ITANCE µF | CASE SIZE | KEMET PART NUMBER | MAX. DC LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MAX IMPEDANCE Ω@ 10 kHz |
|---|---|---|---|---|---|
| **35 VOLT RATING AT 85°C — 23 VOLT AT 125°C (Cont'd)** | | | | | |
| 3.9 | C | T340C395(1)035AS | 1.0 | 6 | |
| **4.7** | **C** | **T340C475(1)035AS** | **2.5** | **6** | **5.5** |
| 5.6 | C | T340C565(1)035AS | 2.5 | 6 | |
| **6.8** | **C** | **T340C685(1)035AS** | **3.0** | **6** | **4.2** |
| 8.2 | C | T340C825(1)035AS | 4.0 | 6 | |
| **10.0** | **C** | **T340(2)106(1)035AS** | **4.0** | **6** | **2.8** |
| 12.0 | D/F | T340(2)126(1)035AS | 5.0 | 6 | |
| 15.0 | D/F | T340(2)156(1)035AS | 5.0 | 6 | 2.2 |
| 18.0 | D/F | T340(2)186(1)035AS | 8.0 | 6 | |
| **22.0** | **D/F** | **T340(2)226(1)035AS** | **8.0** | **6** | **1.9** |
| 27.0 | D/F | T340(2)276(1)035AS | 10.0 | 6 | |
| 33.0 | D/E/F | T340(2)336(1)035AS | 10.0 | 6 | 1.4 |
| **47.0** | **E** | **T340E476(1)035AS** | **10.0** | **6** | **1.1** |
| **40 VOLT RATING AT 85°C — 32 VOLT AT 100°C** | | | | | |
| 0.1 | A | T340A104(1)040AS | 1.0 | 6 | 200.0 |
| 0.15 | A | T340A154(1)040AS | 1.0 | 6 | 140.0 |
| 0.22 | A | T340A224(1)040AS | 1.0 | 6 | 95.0 |
| 0.33 | A | T340A334(1)040AS | 1.0 | 6 | 70.0 |
| 0.47 | A | T340A474(1)040AS | 1.0 | 6 | 46.0 |
| 0.68 | A | T340A684(1)040AS | 1.0 | 6 | 34.0 |
| 1.0 | A | T340A105(1)040AS | 1.0 | 6 | 23.0 |
| 1.5 | B | T340B155(1)040AS | 1.0 | 6 | 14.0 |
| 2.2 | B | T340B225(1)040AS | 1.7 | 6 | 10.0 |
| 3.3 | C | T340C335(1)040AS | 2.3 | 6 | 7.0 |
| 4.7 | C | T340C475(1)040AS | 3.0 | 6 | 5.0 |
| 6.8 | C | T340C685(1)040AS | 3.5 | 6 | 3.9 |
| 10.0 | D | T340D106(1)040AS | 4.5 | 6 | 2.6 |
| 15.0 | D | T340D156(1)040AS | 6.0 | 6 | 2.0 |
| 22.0 | D | T340D226(1)040AS | 9.0 | 6 | 1.7 |
| 33.0 | E | T340E336(1)040AS | 10.0 | 6 | 1.3 |
| 47.0 | E | T340E476(1)040AS | 10.0 | 6 | 1.0 |
| **50 VOLT RATING AT 85°C — 33 VOLT AT 125°C** | | | | | |
| 0.1 | A | T340A104(1)050AS | 1.0 | 6 | 220.0 |
| 0.15 | A | T340A154(1)050AS | 1.0 | 6 | 150.0 |
| 0.22 | A | T340A224(1)050AS | 1.0 | 6 | 100.0 |
| 0.33 | A | T340A334(1)050AS | 1.0 | 6 | 75.0 |
| 0.39 | B | T340B394(1)050AS | 1.0 | 6 | |
| 0.47 | B | T340B474(1)050AS | 1.0 | 6 | 50.0 |
| 0.56 | B | T340B564(1)050AS | 1.0 | 6 | |
| 0.68 | B | T340B684(1)050AS | 1.0 | 6 | 36.0 |
| 0.82 | B | T340B824(1)050AS | 1.0 | 6 | |
| 1.0 | B | T340B105(1)050AS | 1.0 | 6 | 25.0 |
| 1.2 | B | T340B125(1)050AS | 1.0 | 6 | |
| 1.5 | B/C | T340(2)155(1)050AS | 1.1 | 6 | 15.0 |
| 1.8 | B | T340B185(1)050AS | 1.1 | 6 | |
| 2.2 | B/C | T340(2)225(1)050AS | 1.5 | 6 | 11.0 |
| 2.7 | C | T340C275(1)050AS | 1.5 | 6 | |
| 3.3 | C/D | T340(2)335(1)050AS | 2.5 | 6 | 7.5 |
| 3.9 | C | T340C395(1)050AS | 3.0 | 6 | |
| 4.7 | C/D | T340(2)475(1)050AS | 3.5 | 6 | 5.5 |
| 5.6 | C | T340C565(1)050AS | 4.0 | 6 | |
| 6.8 | D/F | T340(2)685(1)050AS | 5.0 | 6 | 4.0 |
| 8.2 | D/F | T340(2)825(1)050AS | 6.0 | 6 | |
| 10.0 | D/F | T340(2)106(1)050AS | 7.0 | 6 | 2.8 |
| 12.0 | D/F | T340(2)126(1)050AS | 8.0 | 6 | |
| 15.0 | D/F | T340(2)156(1)050AS | 9.0 | 6 | 2.2 |
| 18.0 | D/F | T340(2)186(1)050AS | 10.0 | 6 | |
| 22.0 | E | T340E226(1)050AS | 10.0 | 6 | 1.7 |

(1) To complete KEMET Part Number, insert M — ±20%, K — ±10%, or J — ±5% for capacitance tolerance as shown in T340 ordering information.
(2) To complete KEMET Part Number, insert letter "C" for 5.0 mm (.197") lead spacing, "D" for 10.0 mm (.394") lead spacing, "E" for 10.0 mm (.394") lead spacing or letter "F" for 5.0 mm (.197") lead spacing. See page 53 for outline drawings.
**Bold face** lines indicate popular part types and values.
Higher voltage and better capacitance tolerance product may be substituted for an order within the same case size at KEMET'S option.