

The KEMET T322 AND T323 (CX01 & CX05) Series offers a complete line of extended range molded solid tantalum capacitors designed specifically for high speed automatic insertion applications. These capacitors offer an extremely high capacitance-to-volume ratio while still maintaining excellent performance characteristics.

Supplied in six axial lead tubular case sizes, these capacitors are ideally suited for use in printed wiring boards and all applications requiring a high degree of packaging density and can be supplied in bulk packaging or lead-taped on reels.

The T322/T323 Series dimensions and tight lead wire-to-body concentricity permit installation by the same automatic insertion equipment used for diodes and resistors. Available in working voltages of

2, 4, 6, 10, 15, 20, 25, 35, and 50 volts. Operating temperature range -55°C to +85°C at full rated voltage and with $\frac{2}{3}$ 85°C rated voltage at 125°C.

The gold color epoxy utilized permits laser marking with outstanding permanency and legibility.

T323 Series capacitors are qualified under MIL-PRF-49137/1 & 5 as Military Style CX01 & CX05.

Typical applications include decoupling, blocking, bypassing and filtering in commercial computers, data processing, communications, and other electronic equipment. The low ESR/impedance at high frequencies offered by this capacitor is especially suitable for decoupling required by high speed computers.

PERFORMANCE CHARACTERISTICS

- **CAPACITANCE/VOLTAGE RANGE:**
0.1-330µF, 2-50 Volts.
- **CAPACITANCE TOLERANCE:** Available in standard EIA nominal values with ±20%, ±10% and ±5% tolerance.
- **DISSIPATION FACTOR:** Maximum DF limits are shown in corresponding series part number listings on pages 44-48. See Application Notes Section, page 76 for additional description.
- **DC LEAKAGE CURRENT:** Each corresponding part number table lists maximum leakage current for each capacitor on pages 44 through 48. See Application Notes Section, page 76 for additional description.
- **RATED VOLTAGE; WORKING VOLTAGE; SURGE VOLTAGE; REVERSE VOLTAGE:** See Application Notes Section, page 76 & 77 for description.
- **AC RIPPLE VOLTAGE:** Permissible AC ripple voltage is related to equivalent series resistance (ESR) and power dissipation capability. Maximum power dissipation for each case size is listed in Table below. For additional description see page 79.

| Case Size | Power Dissipation (max.) @ 25°C (watts) |
|-----------|---|
| A | .060 |
| B | .070 |
| C | .080 |
| D | .090 |
| E | .100 |
| F | .110 |

Maximum Power Dissipation Capability @ 25°C

- **IMPEDANCE and ESR:** See Application Notes Section, pages 77 & 78 for description. Reference ESR values are shown in adjoining column, this page.
- **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.

T322 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 T322 Series product.)

| Cap. µF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 25 Volt | 35 Volt | 50 Volt |
|---------|--------|---------|---------|---------|---------|---------|---------|
| 0.10 | | | | | | 26.0 | 26.0 |
| 0.12 | | | | | | 26.0 | 26.0 |
| 0.15 | | | | | | 21.0 | 21.0 |
| 0.18 | | | | | | 21.0 | 21.0 |
| 0.22 | | | | | | 17.0 | 17.0 |
| 0.27 | | | | | | 17.0 | 17.0 |
| 0.33 | | | | | | 15.0 | 15.0 |
| 0.39 | | | | | | 15.0 | 15.0 |
| 0.47 | | | | | 16.0 | 13.0 | 13.0 |
| 0.56 | | | | | 14.0 | 13.0 | 13.0 |
| 0.68 | | | | | 12.0 | 10.0 | 10.0 |
| 0.82 | | | | | 12.0 | 10.0 | 10.0 |
| 1.00 | | | | 10.0 | 10.0 | 8.0 | 8.0 |
| 1.20 | | | | 10.0 | 10.0 | 8.0 | 8.0 |
| 1.50 | | | 10.0 | 9.0 | 8.0 | 6.0 | 5.0 |
| 1.80 | | | 10.0 | 9.0 | 8.0 | 6.0 | 5.0 |
| 2.20 | | 13.0 | 8.0 | 7.0 | 6.0 | 5.0 | 3.5 |
| 2.70 | | 13.0 | 8.0 | 7.0 | 6.0 | 5.0 | 3.5 |
| 3.30 | 13.0 | 10.0 | 6.0 | 5.5 | 5.0 | 4.0 | 3.0 |
| 3.90 | 13.0 | 10.0 | 6.0 | 5.5 | 5.0 | 4.0 | 3.0 |
| 4.70 | 10.0 | 8.0 | 5.0 | 4.5 | 4.0 | 3.0 | 2.5 |
| 5.60 | 10.0 | 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 |
| 8.20 | 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 |
| 12.0 | 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 |
| 18.0 | 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 |
| 27.0 | 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 | |
| 39.0 | 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 | |
| 56.0 | 2.0 | 1.7 | 1.3 | 1.2 | 1.0 | | |
| 68.0 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | | |
| 82.0 | 1.8 | 1.3 | 1.0 | 0.9 | | | |
| 100.0 | 1.6 | 1.0 | 0.8 | 0.6 | | | |
| 120.0 | 1.6 | 1.0 | 0.8 | | | | |
| 150.0 | 0.9 | 0.8 | 0.6 | | | | |
| 180.0 | 0.9 | 0.8 | | | | | |
| 220.0 | 0.9 | 0.6 | | | | | |
| 270.0 | 0.9 | | | | | | |
| 330.0 | 0.7 | | | | | | |

For additional Environmental Test Information see pages 80, 81 and 82.

- **LEAD MATERIAL:** Solder coated steel core with copper plating per MIL-STD-1276.
- **LEAD TAPE and REEL:** Reeling per specification RS-296. See pages 71 and 73 for additional information.

TANTALUM MOLDED / AXIAL — MIL-PRF-49137/1 & 5

T322 & T323 (CX01 & CX05) SERIES



Effective September 30, 2005, the KEMET T322 Series is RoHS compliant.

CAPACITOR OUTLINE DRAWINGS



DIMENSIONS — INCHES & (MILLIMETERS)

| CASE SIZE | D (MAX) | L (MAX) | W |
|-----------|-------------|--------------|------------|
| A | .095 (2.41) | .260 (6.6) | .020 (.51) |
| B | .110 (2.79) | .290 (7.37) | .020 (.51) |
| C | .180 (4.57) | .345 (8.76) | .020 (.51) |
| D | .180 (4.57) | .420 (10.67) | .020 (.51) |
| E | .280 (7.11) | .530 (13.46) | .025 (.64) |
| F | .300 (7.62) | .710 (18.03) | .025 (.64) |

T322 & T323 ORDERING INFORMATION

TANTALUM — T

SERIES — 32X
Sub-Miniature, Molded, Polar, Solid Tantalum,
Insert appropriate number to replace
letter "X" — 322 or 323 (CX01, CX05).

CASE SIZE — A
A, B, C, D, E, or F

CAPACITANCE IN PICOFARADS — 474
First two digits are significant figures.
Third digit is number of zeros following.

VOLTAGE RATING — M
M — ±20%
K — ±10%
J — ±5%

FAILURE RATE LEVEL — A
A — Not Applicable

LEAD MATERIAL — S
S — Standard
T — 100% Tin

SPECIFICATION (when necessary) — S — C*
— Reeling Per EIA
Specification RS-296

CAPACITANCE TOLERANCE
*M — ±20%
*K — ±10%
*J — ±5%

*Part Number Example: T322A474M035AS (14 digits – no spaces)

* M & K only tolerances available for T323 Series.

MIL-PRF-49137/5 MILITARY ORDERING INFORMATION

TYPE — CX
Capacitor, Fixed, Solid Tantalum,
Molded, Non-hermetically Sealed

STYLE — 05
01, 05 (T323) A, B, C, and D

VOLTAGE — D
D — 225
K — Capacitance Tolerance

| Symbol | Rated (85°C) Volts, DC | Surge (85°C) Volts, DC |
|--------|---------------------------|---------------------------|
| D | 6 | 8.0 |
| F | 10 | 13.0 |
| H | 15 | 20.0 |
| J | 20 | 26.0 |
| K | 25 | 32.0 |
| M | 35 | 46.0 |
| N | 50 | 65.0 |

| Symbol | Capacitance Tolerance Percent (±) |
|--------|--------------------------------------|
| K | 10 |
| M | 20 |

CAPACITANCE TOLERANCE
The nominal capacitance value, expressed in picofarads (pF), is identified by a three-digit number; the first two digits represent significant figures and the last digit specifies the number of zeros to follow.

CAPACITOR MARKING



T322/T323 Tantalum Molded / Axial



TANTALUM MOLDED / AXIAL — MIL-PRF-49137/1 & 5

T322 & T323 (CX01 & CX05) SERIES

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T322 SERIES | | | CX01 & CX05 CAPACITORS PER MIL-PRF-49137/1 & 5 | |
|---|--------------|--------------------------------|-------------------------|-----------------------------|--|---|-----------------------|
| | | | KEMET PART NUMBER | D. C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MILITARY PART NUMBER | KEMET PART NUMBER |
| 2 VOLT RATING AT 85°C — 1.3 VOLT RATING AT 125°C | | | | | | | |
| 6.8 | A | 5,10,20 | T322A685(1)002AS | 0.5 | 10 | | |
| 8.2 | A | 5,10,20 | T322A825(1)002AS | 0.5 | 10 | | |
| 10.0 | A | 5,10,20 | T322A106(1)002AS | 0.5 | 10 | | |
| 12.0 | B | 5,10,20 | T322B126(1)002AS | 0.5 | 10 | | |
| 15.0 | B | 5,10,20 | T322B156(1)002AS | 0.5 | 10 | | |
| 18.0 | B | 5,10,20 | T322B186(1)002AS | 0.5 | 10 | | |
| 22.0 | B | 5,10,20 | T322B226(1)002AS | 0.5 | 10 | | |
| 27.0 | B | 5,10,20 | T322B276(1)002AS | 0.5 | 10 | | |
| 33.0 | B | 5,10,20 | T322B336(1)002AS | 0.5 | 10 | | |
| 39.0 | C | 5,10,20 | T322C396(1)002AS | 0.6 | 10 | | |
| 47.0 | C | 5,10,20 | T322C476(1)002AS | 0.8 | 10 | | |
| 56.0 | C | 5,10,20 | T322C566(1)002AS | 0.9 | 10 | | |
| 68.0 | C | 5,10,20 | T322C686(1)002AS | 1.1 | 10 | | |
| 4 VOLT RATING AT 85°C — 2.7 VOLT RATING AT 125°C | | | | | | | |
| 4.7 | A | 5,10,20 | T322A475(1)004AS | 0.5 | 8 | | |
| 5.6 | A | 5,10,20 | T322A565(1)004AS | 0.5 | 8 | | |
| 6.8 | A | 5,10,20 | T322A685(1)004AS | 0.5 | 8 | | |
| 8.2 | B | 5,10,20 | T322B825(1)004AS | 0.5 | 8 | | |
| 10.0 | B | 5,10,20 | T322B106(1)004AS | 0.5 | 8 | | |
| 12.0 | B | 5,10,20 | T322B126(1)004AS | 0.5 | 8 | | |
| 15.0 | B | 5,10,20 | T322B156(1)004AS | 0.5 | 8 | | |
| 18.0 | B | 5,10,20 | T322B186(1)004AS | 0.6 | 8 | | |
| 22.0 | B | 5,10,20 | T322B226(1)004AS | 0.7 | 8 | | |
| 27.0 | C | 5,10,20 | T322C276(1)004AS | 0.9 | 8 | | |
| 33.0 | C | 5,10,20 | T322C336(1)004AS | 1.1 | 8 | | |
| 39.0 | C | 5,10,20 | T322C396(1)004AS | 1.2 | 8 | | |
| 47.0 | C | 5,10,20 | T322C476(1)004AS | 1.5 | 8 | | |
| 56.0 | D | 5,10,20 | T322D566(1)004AS | 1.8 | 8 | | |
| 68.0 | D | 5,10,20 | T322D686(1)004AS | 2.2 | 8 | | |
| 6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C | | | | | | | |
| 3.3 | A | 5,10,20 | T322A335(1)006AS | 0.5 | 4 | | |
| 3.9 | A | 5,10,20 | T322A395(1)006AS | 0.5 | 4 | | |
| 4.7 | A | 5 | T322A475J006AS | 0.5 | 4 | | |
| 4.7 | A | 10 | T322A475K006AS | 0.5 | 4 | CX05D475K | T323A475K006AS |
| 4.7 | A | 20 | T322A475M006AS | 0.5 | 4 | CX05D475M | T323A475M006AS |
| 5.6 | B | 5 | T322B565J006AS | 0.5 | 4 | | |
| 5.6 | B | 10 | T322B565K006AS | 0.5 | 4 | CX01D565K | T323B565K 006AS |
| 5.6 | B | 20 | T322B565M006AS | 0.5 | 4 | CX01D565M | T323B565M006AS |
| 6.8 | B | 5 | T322B685J006AS | 0.5 | 6 | | |
| 6.8 | B | 10 | T322B685K006AS | 0.5 | 6 | CX01D685K | T323B685K006AS |
| 6.8 | B | 20 | T322B685M006AS | 0.5 | 6 | CX01D685M | T323B685M006AS |
| 8.2 | B | 5 | T322B825J006AS | 0.5 | 6 | | |
| 8.2 | B | 10 | T322B825K006AS | 0.5 | 6 | CX01D825K | T323B825K 006AS |
| 8.2 | B | 20 | T322B825M006AS | 0.5 | 6 | CX01D825M | T323B825M006AS |
| 10.0 | B | 5 | T322B106J006AS | 0.5 | 6 | | |
| 10.0 | B | 10 | T322B106K006AS | 0.5 | 6 | CX01D106K | T323B106K006AS |
| 10.0 | B | 20 | T322B106M006AS | 0.5 | 6 | CX01D106M | T323B106M006AS |
| 12.0 | B | 5 | T322B126J006AS | 0.6 | 6 | | |
| 12.0 | B | 10 | T322B126K006AS | 0.6 | 6 | CX01D126K | T323B126K 006AS |
| 12.0 | B | 20 | T322B126M006AS | 0.6 | 6 | CX01D126M | T323B126M006AS |
| 15.0 | B | 5 | T322B156J006AS | 0.7 | 6 | | |
| 15.0 | B | 10 | T322B156K006AS | 0.7 | 6 | CX05D156K | T323B156K006AS |
| 15.0 | B | 20 | T322B156M006AS | 0.7 | 6 | CX05D156M | T323B156M006AS |
| 18.0 | C | 5,10,20 | T322C186(1)006AS | 0.9 | 6 | | |
| 22.0 | C | 5,10,20 | T322C226(1)006AS | 1.1 | 6 | | |
| 27.0 | C | 5,10,20 | T322C276(1)006AS | 1.3 | 6 | | |
| 33.0 | C | 5 | T322C336J006AS | 1.5 | 6 | | |
| 33.0 | C | 10 | T322C336K006AS | 1.5 | 6 | CX05D336K | T323C336K006AS |
| 33.0 | C | 20 | T322C336M006AS | 1.5 | 6 | CX05D336M | T323C336M006AS |
| 39.0 | D | 5,10,20 | T322D396(1)006AS | 1.9 | 6 | | |
| 47.0 | D | 5 | T322D476J006AS | 2.3 | 6 | | |
| 47.0 | D | 10 | T322D476K006AS | 2.3 | 6 | CX05D476K | T323D476K006AS |
| 47.0 | D | 20 | T322D476M006AS | 2.3 | 6 | CX05D476M | T323D476M006AS |
| 56.0 | D | 5,10,20 | T322D566(1)006AS | 2.7 | 6 | | |
| 68.0 | D | 5,10,20 | T322D686(1)006AS | 3.3 | 6 | | |

(1) To complete KEMET Part Number, insert Capacitance Tolerance Symbol as follows: M — ±20%, K — ±10%, J — ±5%
Bold Face lines indicate preferred part types and values.

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T322 SERIES | | | CX01 & CX05 CAPACITORS PER MIL-PRF-49137/1 & 5 | |
|--|--------------|--------------------------------|-------------------------|----------------------------|--|---|----------------------|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MILITARY PART NUMBER | KEMET PART NUMBER |
| 6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C (Cont'd) | | | | | | | |
| 82.0 | E | 5,10,20 | T322E826(1)006AS | 3.9 | 8 | | |
| 100.0 | E | 5,10,20 | T322E107(1)006AS | 4.8 | 8 | | |
| 120.0 | E | 5,10,20 | T322E127(1)006AS | 5.0 | 8 | | |
| 150.0 | E | 5,10,20 | T322E157(1)006AS | 5.0 | 8 | | |
| 180.0 | E | 5,10,20 | T322E187(1)006AS | 8.6 | 8 | | |
| 220.0 | E | 5,10,20 | T322E227(1)006AS | 10.0 | 8 | | |
| 270.0 | F | 5,10,20 | T322F277(1)006AS | 10.0 | 8 | | |
| 330.0 | F | 5,10,20 | T322F337(1)006AS | 10.0 | 8 | | |
| 10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C | | | | | | | |
| 2.2 | A | 5,10,20 | T322A225(1)010AS | 0.5 | 4 | | |
| 2.7 | A | 5,10,20 | T322A275(1)010AS | 0.5 | 4 | | |
| 3.3 | A | 5 | T322A335J010AS | 0.5 | 4 | | |
| 3.3 | A | 10 | T322A335K010AS | 0.5 | 4 | CX05F335K | T323A335K010AS |
| 3.3 | A | 20 | T322A335M010AS | 0.5 | 4 | CX05F335M | T323A335M010AS |
| 3.9 | B | 5,10,20 | T322B395(1)010AS | 0.5 | 4 | | |
| 4.7 | B | 5,10,20 | T322B475(1)010AS | 0.5 | 4 | | |
| 5.6 | B | 5,10,20 | T322B565(1)010AS | 0.5 | 4 | | |
| 6.8 | B | 5,10,20 | T322B685(1)010AS | 0.5 | 6 | | |
| 8.2 | B | 5,10,20 | T322B825(1)010AS | 0.7 | 6 | | |
| 10.0 | B | 5 | T322B106J010AS | 0.8 | 6 | | |
| 10.0 | B | 10 | T322B106K010AS | 0.8 | 6 | CX05F106K | T323B106K010AS |
| 10.0 | B | 20 | T322B106M010AS | 0.8 | 6 | CX05F106M | T323B106M010AS |
| 12.0 | C | 5,10,20 | T322C126(1)010AS | 1.0 | 6 | | |
| 15.0 | C | 5,10,20 | T322C156(1)010AS | 1.2 | 6 | | |
| 18.0 | C | 5,10,20 | T322C186(1)010AS | 1.4 | 6 | | |
| 22.0 | C | 5 | T322C226J010AS | 1.5 | 6 | | |
| 22.0 | C | 10 | T322C226K010AS | 1.5 | 6 | CX05F226K | T323C226K010AS |
| 22.0 | C | 20 | T322C226M010AS | 1.5 | 6 | CX05F226M | T323C226M010AS |
| 27.0 | D | 5 | T322D276J010AS | 2.2 | 6 | | |
| 27.0 | D | 10 | T322D276K010AS | 2.2 | 6 | CX05F276K | T323D276K010AS |
| 27.0 | D | 20 | T322D276M010AS | 2.2 | 6 | CX05F276M | T323D276M010AS |
| 33.0 | D | 5 | T322D336J010AS | 2.6 | 6 | | |
| 33.0 | D | 10 | T322D336K010AS | 2.6 | 6 | CX05F336K | T323D336K010AS |
| 33.0 | D | 20 | T322D336M010AS | 2.6 | 6 | CX05F336M | T323D336M010AS |
| 39.0 | D | 5 | T322D396J010AS | 3.1 | 6 | | |
| 39.0 | D | 10 | T322D396K010AS | 3.1 | 6 | CX05F396K | T323D396K010AS |
| 39.0 | D | 20 | T322D396M010AS | 3.1 | 6 | CX05F396M | T323D396M010AS |
| 47.0 | D | 5 | T322D476J010AS | 3.8 | 6 | | |
| 47.0 | D | 10 | T322D476K010AS | 3.8 | 6 | CX05F476K | T323D476K010AS |
| 47.0 | D | 20 | T322D476M010AS | 3.8 | 6 | CX05F476M | T323D476M010AS |
| 56.0 | E | 5,10,20 | T322E566(1)010AS | 4.4 | 6 | | |
| 68.0 | E | 5,10,20 | T322E686(1)010AS | 5.0 | 6 | | |
| 82.0 | E | 5,10,20 | T322E826(1)010AS | 5.0 | 8 | | |
| 100.0 | E | 5,10,20 | T322E107(1)010AS | 8.0 | 8 | | |
| 120.0 | E | 5,10,20 | T322E127(1)010AS | 9.6 | 8 | | |
| 150.0 | E | 5,10,20 | T322E157(1)010AS | 10.0 | 8 | | |
| 180.0 | F | 5,10,20 | T322F187(1)010AS | 10.0 | 8 | | |
| 220.0 | F | 5,10,20 | T322F227(1)010AS | 10.0 | 8 | | |
| 15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C | | | | | | | |
| 1.5 | A | 5,10,20 | T322A155(1)015AS | 0.5 | 4 | | |
| 1.8 | A | 5,10,20 | T322A185(1)015AS | 0.5 | 4 | | |
| 2.2 | A | 5 | T322A225J015AS | 0.5 | 4 | | |
| 2.2 | A | 10 | T322A225K015AS | 0.5 | 4 | CX05H225K | T323A225K015AS |
| 2.2 | A | 20 | T322A225M015AS | 0.5 | 4 | CX05H225M | T323A225M015AS |
| 2.7 | B | 5,10,20 | T322B275(1)015AS | 0.5 | 4 | | |
| 3.3 | B | 5,10,20 | T322B335(1)015AS | 0.5 | 4 | | |
| 3.9 | B | 5,10,20 | T322B395(1)015AS | 0.5 | 4 | | |
| 4.7 | B | 5,10,20 | T322B475(1)015AS | 0.6 | 4 | | |
| 5.6 | B | 5,10,20 | T322B565(1)015AS | 0.7 | 4 | | |
| 6.8 | B | 5 | T322B685J015AS | 0.8 | 6 | | |
| 6.8 | B | 10 | T322B685K015AS | 0.8 | 6 | CX05H685K | T323B685K015AS |
| 6.8 | B | 20 | T322B685M015AS | 0.8 | 6 | CX05H685M | T323B685M015AS |
| 8.2 | C | 5,10,20 | T322C825(1)015AS | 1.0 | 6 | | |
| 10.0 | C | 5,10,20 | T322C106(1)015AS | 1.2 | 6 | | |
| 12.0 | C | 5,10,20 | T322C126(1)015AS | 1.4 | 6 | | |
| 15.0 | C | 5 | T322C156J015AS | 1.5 | 6 | | |
| 15.0 | C | 10 | T322C156K015AS | 1.5 | 6 | CX05H156K | T323C156K015AS |
| 15.0 | C | 20 | T322C156M015AS | 1.5 | 6 | CX05H156M | T323C156M015AS |

(1) To complete KEMET Part Number, insert Capacitance Tolerance Symbol as follows: M — ±20%, K — ±10%, J — ±5%
Bold Face lines indicate preferred part types and values.

T322/T323 Series Tantalum
Molded / Axial



TANTALUM MOLDED / AXIAL — MIL-PRF-49137/1 & 5

T322 & T323 (CX01 & CX05) SERIES

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T322 SERIES | | | CX01 & CX05 CAPACITORS PER MIL-PRF-49137/1 & 5 | |
|--|--------------|--------------------------------|-----------------------|-----------------------------|--|---|----------------------------------|
| | | | KEMET PART NUMBER | D. C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MILITARY PART NUMBER | KEMET PART NUMBER |
| 15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C (Cont'd) | | | | | | | |
| 18.0 | D | 5,10,20 | T322D186(1)015AS | 2.2 | 6 | | |
| 22.0 | D | 5 | T322D226J015AS | 2.6 | 6 | | |
| 22.0 | D | 10 | T322D226K015AS | 2.6 | 6 | CX05H226K CX05H226M | T323D226K015AS T323D226M015AS |
| 22.0 | D | 20 | T322D226M015AS | 2.6 | 6 | | |
| 27.0 | D | 5,10,20 | T322D276(1)015AS | 3.2 | 6 | | |
| 33.0 | D | 5 | T322D336J015AS | 4.0 | 6 | | |
| 33.0 | D | 10 | T322D336K015AS | 4.0 | 6 | CX05H336K CX05H336M | T323D336K015AS T323E336M015AS |
| 33.0 | D | 20 | T322D336M015AS | 4.0 | 6 | | |
| 39.0 | E | 5,10,20 | T322E396(1)015AS | 4.7 | 6 | | |
| 47.0 | E | 5,10,20 | T322E476(1)015AS | 5.0 | 6 | | |
| 56.0 | E | 5,10,20 | T322E566(1)015AS | 6.7 | 6 | | |
| 68.0 | E | 5,10,20 | T322E686(1)015AS | 8.2 | 6 | | |
| 82.0 | E | 5,10,20 | T322E826(1)015AS | 9.8 | 8 | | |
| 100.0 | E | 5,10,20 | T322E107(1)015AS | 10.0 | 8 | | |
| 120.0 | F | 5,10,20 | T322F127(1)015AS | 10.0 | 8 | | |
| 150.0 | F | 5,10,20 | T322F157(1)015AS | 10.0 | 8 | | |
| 20 VOLT RATING AT 85°C — 13 VOLT RATING AT 125°C | | | | | | | |
| 1.0 | A | 5,10,20 | T322A105(1)020AS | 0.5 | 4 | | |
| 1.2 | A | 5,10,20 | T322A125(1)020AS | 0.5 | 4 | | |
| 1.5 | A | 5 | T322A155J020AS | 0.5 | 4 | | |
| 1.5 | A | 10 | T322A155K020AS | 0.5 | 4 | CX05J155K CX05J155M | T323A155K020AS T323A155M020AS |
| 1.5 | A | 20 | T322A155M020AS | 0.5 | 4 | | |
| 1.8 | B | 5,10,20 | T322B185(1)020AS | 0.5 | 4 | | |
| 2.2 | B | 5,10,20 | T322B225(1)020AS | 0.5 | 4 | | |
| 2.7 | B | 5,10,20 | T322B275(1)020AS | 0.5 | 4 | | |
| 3.3 | B | 5,10,20 | T322B335(1)020AS | 0.5 | 4 | | |
| 3.9 | B | 5,10,20 | T322B395(1)020AS | 0.6 | 4 | | |
| 4.7 | B | 5 | T322B475J020AS | 0.8 | 4 | | |
| 4.7 | B | 10 | T322B475K020AS | 0.8 | 4 | CX05J475K CX05J475M | T323B475K020AS T323B475M020AS |
| 4.7 | B | 20 | T322B475M020AS | 0.8 | 4 | | |
| 5.6 | C | 5,10,20 | T322C565(1)020AS | 0.9 | 4 | | |
| 6.8 | C | 5,10,20 | T322C685(1)020AS | 1.1 | 6 | | |
| 8.2 | C | 5,10,20 | T322C825(1)020AS | 1.3 | 6 | | |
| 10.0 | C | 5,10,20 | T322C106(1)020AS | 1.6 | 6 | | |
| 12.0 | D | 5 | T322D126J020AS | 1.9 | 6 | | |
| 12.0 | D | 10 | T322D126K020AS | 1.9 | 6 | CX05J126K CX05J126M | T323D126K020AS T323D126M020AS |
| 12.0 | D | 20 | T322D126M020AS | 1.9 | 6 | | |
| 15.0 | D | 5 | T322D156J020AS | 2.4 | 6 | | |
| 15.0 | D | 10 | T322D156K020AS | 2.4 | 6 | CX05J156K CX05J156M | T323D156K020AS T323D156M020AS |
| 15.0 | D | 20 | T322D156M020AS | 2.4 | 6 | | |
| 18.0 | D | 5,10,20 | T322D186(1)020AS | 2.9 | 6 | | |
| 22.0 | D | 5,10,20 | T322D226(1)020AS | 3.5 | 6 | | |
| 27.0 | E | 5,10,20 | T322E276(1)020AS | 4.3 | 6 | | |
| 33.0 | E | 5,10,20 | T322E336(1)020AS | 5.0 | 6 | | |
| 39.0 | E | 5,10,20 | T322E396(1)020AS | 6.2 | 6 | | |
| 47.0 | E | 5,10,20 | T322E476(1)020AS | 7.5 | 6 | | |
| 56.0 | E | 5,10,20 | T322E566(1)020AS | 8.9 | 6 | | |
| 68.0 | E | 5,10,20 | T322E686(1)020AS | 10.0 | 6 | | |
| 82.0 | F | 5,10,20 | T322F826(1)020AS | 10.0 | 8 | | |
| 100.0 | F | 5,10,20 | T322F107(1)020AS | 10.0 | 8 | | |
| 25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C | | | | | | | |
| 0.47 | A | 5,10,20 | T322A474(1)025AS | 0.5 | 3 | | |
| 0.56 | A | 5,10,20 | T322A564(1)025AS | 0.5 | 3 | | |
| 0.68 | A | 5,10,20 | T322A684(1)025AS | 0.5 | 3 | | |
| 0.82 | A | 5,10,20 | T322A824(1)025AS | 0.5 | 3 | | |
| 1.0 | A | 5 | T322A105J025AS | 0.5 | 3 | | |
| 1.0 | A | 10 | T322A105K025AS | 0.5 | 3 | CX05K105K CX05K105M | T323A105K025AS T323A105M025AS |
| 1.0 | A | 20 | T322A105M025AS | 0.5 | 3 | | |
| 1.2 | B | 5,10,20 | T322B125(1)025AS | 0.5 | 3 | | |
| 1.5 | B | 5 | T322B155J025AS | 0.5 | 3 | | |
| 1.5 | B | 10 | T322B155K025AS | 0.5 | 3 | CX01K155K CX01K155M | T323B155K025AS T323B155M020AS |
| 1.5 | B | 20 | T322B155M025AS | 0.5 | 3 | | |
| 1.8 | B | 5 | T322B185J025AS | 0.5 | 3 | | |
| 1.8 | B | 10 | T322B185K025AS | 0.5 | 3 | CX01K185K CX01K185M | T323B185K025AS T323B185M025AS |
| 1.8 | B | 20 | T322B185M025AS | 0.5 | 3 | | |
| 2.2 | B | 5 | T322B225J025AS | 0.5 | 3 | | |
| 2.2 | B | 10 | T322B225K025AS | 0.5 | 3 | CX05K225K | T323B225K025AS |

(1) To complete KEMET Part Number, insert Capacitance Tolerance Symbol as follows: M — ±20%, K — ±10%, J — ±5%
Bold Face lines indicate preferred part types and values.

TANTALUM MOLDED / AXIAL — MIL-PRF-49137/1 & 5
T322 & T323 (CX01 & CX05) SERIES



RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T322 SERIES | | | CX01 & CX05 CAPACITORS PER MIL-PRF-49137/1 & 5 | | | |
|--|--------------|--------------------------------|-------------------------|-----------------------------|--|---|--|--------------------------------------|--|
| | | | KEMET PART NUMBER | D. C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MILITARY PART NUMBER | KEMET PART NUMBER | | |
| 25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | |
| 2.2 | B | 20 | T322B225M025AS | 0.5 | 3 | CX01/5K225M | T323B225M025AS | | |
| 2.7 | B | 5,10,20 | T322B275(1)025AS | 0.5 | 3 | | | | |
| 3.3 | B | 5 | T322B335J025AS | 0.7 | 3 | | | | |
| 3.3 | B | 10 | T322B335K025AS | 0.7 | 3 | | | | |
| 3.3 | B | 20 | T322B335M025AS | 0.7 | 3 | | | | |
| 3.9 | C | 5,10,20 | T322C395(1)025AS | 0.8 | 3 | CX05K685K CX05K685M | T323C685K025AS T323C685M025AS | | |
| 4.7 | C | 5,10,20 | T322C475(1)025AS | 0.9 | 4 | | | | |
| 5.6 | C | 5,10,20 | T322C565(1)025AS | 1.1 | 4 | | | | |
| 6.8 | C | 5 | T322C685J025AS | 1.4 | 4 | | | | |
| 6.8 | C | 10 | T322C685K025AS | 1.4 | 4 | | | | |
| 6.8 | C | 20 | T322C685M025AS | 1.4 | 4 | | | | |
| 8.2 | C | 5,10,20 | T322C825(1)025AS | 1.5 | 4 | | | | |
| 10.0 | C | 5 | T322C106J025AS | 1.5 | 4 | | | | |
| 10.0 | C | 10 | T322C106K025AS | 1.5 | 4 | | | | |
| 10.0 | C | 20 | T322C106M025AS | 1.5 | 4 | | | | |
| 12.0 | D | 5,10,20 | T322D126(1)025AS | 2.4 | 4 | | | | |
| 15.0 | D | 5,10,20 | T322D156(1)025AS | 3.0 | 4 | | | | |
| 18.0 | E | 5,10,20 | T322E186(1)025AS | 3.6 | 6 | | | | |
| 22.0 | E | 5,10,20 | T322E226(1)025AS | 4.4 | 6 | | | | |
| 27.0 | E | 5,10,20 | T322E276(1)025AS | 5.4 | 6 | | | | |
| 33.0 | E | 5,10,20 | T322E336(1)025AS | 6.6 | 6 | | | | |
| 39.0 | E | 5,10,20 | T322E396(1)025AS | 7.8 | 6 | | | | |
| 47.0 | E | 5,10,20 | T322E476(1)025AS | 9.4 | 6 | | | | |
| 56.0 | F | 5,10,20 | T322F566(1)025AS | 10.0 | 6 | | | | |
| 68.0 | F | 5,10,20 | T322F686(1)025AS | 10.0 | 6 | | | | |
| 35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C | | | | | | | | | |
| 0.1 | A | 5,10,20 | T322A104(1)035AS | 0.5 | 3 | CX05M334K CX05M334M | T323A334K035AS T323A334M035AS | | |
| 0.12 | A | 5,10,20 | T322A124(1)035AS | 0.5 | 3 | | | | |
| 0.15 | A | 5,10,20 | T322A154(1)035AS | 0.5 | 3 | | | | |
| 0.18 | A | 5,10,20 | T322A184(1)035AS | 0.5 | 3 | | | | |
| 0.22 | A | 5,10,20 | T322A224(1)035AS | 0.5 | 3 | | | | |
| 0.27 | A | 5,10,20 | T322A274(1)035AS | 0.5 | 3 | | | | |
| 0.33 | A | 5 | T322A334J035AS | 0.5 | 3 | | | | |
| 0.33 | A | 10 | T322A334K035AS | 0.5 | 3 | | | | |
| 0.33 | A | 20 | T322A334M035AS | 0.5 | 3 | | | | |
| 0.39 | A | 5,10,20 | T322A394(1)035AS | 0.5 | 3 | | | | |
| 0.47 | A | 5 | T322A474J035AS | 0.5 | 3 | | | | |
| 0.47 | A | 10 | T322A474K035AS | 0.5 | 3 | | | | |
| 0.47 | A | 20 | T322A474M035AS | 0.5 | 3 | | | | |
| 0.56 | B | 5 | T322B564J035AS | 0.5 | 3 | | | CX01M564K CX01M564M | T323B564K035AS T323B564M035AS |
| 0.56 | B | 10 | T322B564K035AS | 0.5 | 3 | | | | |
| 0.56 | B | 20 | T322B564M035AS | 0.5 | 3 | CX01M684K CX01M684M | T323B684K035AS T323B684M035AS | | |
| 0.68 | B | 5 | T322B684J035AS | 0.5 | 3 | | | | |
| 0.68 | B | 10 | T322B684K035AS | 0.5 | 3 | | | | |
| 0.68 | B | 20 | T322B684M035AS | 0.5 | 3 | CX01M824K CX01M824M | T323B824K035AS T323B824M035AS | | |
| 0.82 | B | 5 | T322B824J035AS | 0.5 | 3 | | | | |
| 0.82 | B | 10 | T322B824K035AS | 0.5 | 3 | CX01M105K CX01M105M | T323B105K035AS T323B105M035AS | | |
| 0.82 | B | 20 | T322B824M035AS | 0.5 | 3 | | | | |
| 1.0 | B | 5 | T322B105J035AS | 0.5 | 3 | CX01M125K CX01M125M | T323B125K035AS T323B125M035AS | | |
| 1.0 | B | 10 | T322B105K035AS | 0.5 | 3 | | | | |
| 1.0 | B | 20 | T322B105M035AS | 0.5 | 3 | CX05M155K CX05M155M | T323B155K035AS T323B155M035AS | | |
| 1.2 | B | 5 | T322B125J035AS | 0.5 | 3 | | | | |
| 1.2 | B | 10 | T322B125K035AS | 0.5 | 3 | CX05M155K CX05M155M | T323B155K035AS T323B155M035AS | | |
| 1.2 | B | 20 | T322B125M035AS | 0.5 | 3 | | | | |
| 1.5 | B | 5 | T322B155J035AS | 0.5 | 3 | CX05M155K CX05M155M | T323B155K035AS T323B155M035AS | | |
| 1.5 | B | 10 | T322B155K035AS | 0.5 | 3 | | | | |
| 1.5 | B | 20 | T322B155M035AS | 0.5 | 3 | CX05M335K CX05M335M | T323C335K035AS T323C335M035AS | | |
| 1.8 | C | 5,10,20 | T322C185(1)035AS | 0.5 | 3 | | | | |
| 2.2 | C | 5,10,20 | T322C225(1)035AS | 0.6 | 3 | | | | |
| 2.7 | C | 5,10,20 | T322C275(1)035AS | 0.8 | 3 | | | | |
| 3.3 | C | 5 | T322C335J035AS | 0.9 | 4 | | | | |
| 3.3 | C | 10 | T322C335K035AS | 0.9 | 4 | | | | |
| 3.3 | C | 20 | T322C335M035AS | 0.9 | 4 | | | | |
| 3.9 | C | 5 | T322C395J035AS | 1.1 | 4 | | | | |
| 3.9 | C | 10 | T322C395K035AS | 1.1 | 4 | | | | |
| 3.9 | C | 20 | T322C395M035AS | 1.1 | 4 | | | | |
| 4.7 | C | 5 | T322C475J035AS | 1.3 | 4 | | | | |
| 4.7 | C | 10 | T322C475K035AS | 1.3 | 4 | | | | |
| 4.7 | C | 20 | T322C475M035AS | 1.3 | 4 | | | | |

(1) To complete KEMET Part Number, insert Capacitance Tolerance Symbol as follows: M — ±20%, K — ±10%, J — ±5%
Bold Face lines indicate preferred part types and values.



TANTALUM MOLDED / AXIAL — MIL-PRF-49137/1 & 5

T322 & T323 (CX01 & CX05) SERIES

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T322 SERIES | | | CX01 & CX05 CAPACITORS PER MIL-PRF-49137/1 & 5 | |
|---|--------------|--------------------------------|-------------------------|-----------------------------|--|---|-----------------------|
| | | | KEMET PART NUMBER | D. C. LEAKAGE µA@25°C | MAX. DISSIPATION FACTOR %@25°C, 120 HZ | MILITARY PART NUMBER | KEMET PART NUMBER |
| 35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C | | | | | | | |
| 5.6 | D | 5,10,20 | T322D565(1)035AS | 1.6 | 4 | | |
| 6.8 | D | 5 | T322D685J035AS | 1.9 | 4 | | |
| 6.8 | D | 10 | T322D685K035AS | 1.9 | 4 | CX05M685K | T323D685K035AS |
| 6.8 | D | 20 | T322D685M035AS | 1.9 | 4 | CX05M685M | T323D685M035AS |
| 8.2 | D | 5,10,20 | T322D825(1)035AS | 2.3 | 4 | | |
| 10.0 | D | 5 | T322D106J035AS | 2.8 | 4 | | |
| 10.0 | D | 10 | T322D106K035AS | 2.8 | 4 | CX05M106K | T323D106K035AS |
| 10.0 | D | 20 | T322D106M035AS | 2.8 | 4 | CX05M106M | T323D106M035AS |
| 12.0 | E | 5,10,20 | T322E126(1)035AS | 3.3 | 4 | | |
| 15.0 | E | 5,10,20 | T322E156(1)035AS | 4.2 | 6 | | |
| 18.0 | E | 5,10,20 | T322E186(1)035AS | 5.0 | 6 | | |
| 22.0 | E | 5,10,20 | T322E226(1)035AS | 6.2 | 6 | | |
| 27.0 | E | 5,10,20 | T322E276(1)035AS | 7.5 | 6 | | |
| 33.0 | E | 5,10,20 | T322E336(1)035AS | 9.2 | 6 | | |
| 39.0 | F | 5,10,20 | T322F396(1)035AS | 10.0 | 6 | | |
| 47.0 | F | 5,10,20 | T322F476(1)035AS | 10.0 | 6 | | |
| 50 VOLT RATING AT 85°C — 33 VOLT RATING AT 125°C | | | | | | | |
| 0.1 | A | 5 | T322A104J050AS | 0.5 | 3 | | |
| 0.1 | A | 10 | T322A104K050AS | 0.5 | 3 | CX05N104K | T323A104K050AS |
| 0.1 | A | 20 | T322A104M050AS | 0.5 | 3 | CX05N104M | T323A104M050AS |
| 0.12 | A | 5,10,20 | T322A124(1)050AS | 0.5 | 3 | | |
| 0.15 | A | 5 | T322A154J050AS | 0.5 | 3 | | |
| 0.15 | A | 10 | T322A154K050AS | 0.5 | 3 | CX05N154K | T323A154K050AS |
| 0.15 | A | 20 | T322A154M050AS | 0.5 | 3 | CX05N154M | T323A154M050AS |
| 0.18 | A | 5,10,20 | T322A184(1)050AS | 0.5 | 3 | | |
| 0.22 | A | 5 | T322A224J050AS | 0.5 | 3 | | |
| 0.22 | A | 10 | T322A224K050AS | 0.5 | 3 | CX05N224K | T323A224K050AS |
| 0.22 | A | 20 | T322A224M050AS | 0.5 | 3 | CX05N224M | T323A224M050AS |
| 0.27 | A | 5,10,20 | T322A274(1)050AS | 0.5 | 3 | | |
| 0.33 | B | 5 | T322B334J050AS | 0.5 | 3 | | |
| 0.33 | B | 10 | T322B334K050AS | 0.5 | 3 | CX05N334K | T323B334K050AS |
| 0.33 | B | 20 | T322B334M050AS | 0.5 | 3 | CX05N334M | T323B334M050AS |
| 0.39 | B | 5 | T322B394J050AS | 0.5 | 3 | | |
| 0.39 | B | 10 | T322B394K050AS | 0.5 | 3 | CX05N394K | T323B394K050AS |
| 0.39 | B | 20 | T322B394M050AS | 0.5 | 3 | CX05N394M | T323B394M050AS |
| 0.47 | B | 5 | T322B474J050AS | 0.5 | 3 | | |
| 0.47 | B | 10 | T322B474K050AS | 0.5 | 3 | CX05N474K | T323B474K050AS |
| 0.47 | B | 20 | T322B474M050AS | 0.5 | 3 | CX05N474M | T323B474M050AS |
| 0.56 | B | 5,10,20 | T322B564(1)050AS | 0.5 | 3 | | |
| 0.68 | B | 5 | T322B684J050AS | 0.5 | 3 | | |
| 0.68 | B | 10 | T322B684K050AS | 0.5 | 3 | CX05N684K | T323B684K050AS |
| 0.68 | B | 20 | T322B684M050AS | 0.5 | 3 | CX05N684M | T323B684M050AS |
| 0.82 | B | 5,10,20 | T322B824(1)050AS | 0.5 | 3 | | |
| 1.0 | B | 5 | T322B105J050AS | 0.5 | 3 | | |
| 1.0 | B | 10 | T322B105K050AS | 0.5 | 3 | CX05N105K | T323B105K050AS |
| 1.0 | B | 20 | T322B105M050AS | 0.5 | 3 | CX05N105M | T323B105M050AS |
| 1.2 | C | 5,10,20 | T322C125(1)050AS | 0.5 | 3 | | |
| 1.5 | C | 5 | T322C155J050AS | 0.6 | 4 | | |
| 1.5 | C | 10 | T322C155K050AS | 0.6 | 4 | CX05N155K | T323C155K050AS |
| 1.5 | C | 20 | T322C155M050AS | 0.6 | 4 | CX05N155M | T323C155M050AS |
| 1.8 | C | 5,10,20 | T322C185(1)050AS | 0.7 | 4 | | |
| 2.2 | C | 5 | T322C225J050AS | 0.9 | 4 | | |
| 2.2 | C | 10 | T322C225K050AS | 0.9 | 4 | CX05N225K | T323C225K050AS |
| 2.2 | C | 20 | T322C225M050AS | 0.9 | 4 | CX05N225M | T323C225M050AS |
| 2.7 | D | 5,10,20 | T322D275(1)050AS | 1.1 | 4 | | |
| 3.3 | D | 5 | T322D335J050AS | 1.3 | 4 | | |
| 3.3 | D | 10 | T322D335K050AS | 1.3 | 4 | CX05N335K | T323D335K050AS |
| 3.3 | D | 20 | T322D335M050AS | 1.3 | 4 | CX05N335M | T323D335M050AS |
| 3.9 | D | 5,10,20 | T322D395(1)050AS | 1.6 | 4 | | |
| 4.7 | D | 5 | T322D475J050AS | 1.9 | 4 | | |
| 4.7 | D | 10 | T322D475K050AS | 1.9 | 4 | CX05N475K | T323D475K050AS |
| 4.7 | D | 20 | T322D475M050AS | 1.9 | 4 | CX05N475M | T323D475M050AS |
| 5.6 | E | 5,10,20 | T322E565(1)050AS | 2.2 | 4 | | |
| 6.8 | E | 5,10,20 | T322E685(1)050AS | 2.7 | 4 | | |
| 8.2 | E | 5,10,20 | T322E825(1)050AS | 3.2 | 4 | | |
| 10.0 | E | 5,10,20 | T322E106(1)050AS | 4.0 | 6 | | |
| 12.0 | F | 5,10,20 | T322F126(1)050AS | 4.8 | 6 | | |
| 15.0 | F | 5,10,20 | T322F156(1)050AS | 6.0 | 6 | | |
| 18.0 | F | 5,10,20 | T322F186(1)050AS | 7.2 | 6 | | |
| 22.0 | F | 5,10,20 | T322F226(1)050AS | 8.8 | 6 | | |

(1) To complete KEMET Part Number, insert Capacitance Tolerance Symbol as follows: M — ±20%, K — ±10%, J — ±5%
Bold Face lines indicate preferred part types and values.

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.

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.

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 , $\pm 5\%$ 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.

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 $\pm 20\%$; $\pm 10\%$; $\pm 5\%$ (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: 0.1-220 μ F, 6-50 Volts.
 T340: 0.1-330 μ F, 6-50 Volts.
- **CAPACITANCE TOLERANCE:** Available in standard EIA nominal values with $\pm 20\%$ tolerance standard, $\pm 10\%$ and $\pm 5\%$ 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.
- **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.

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.)

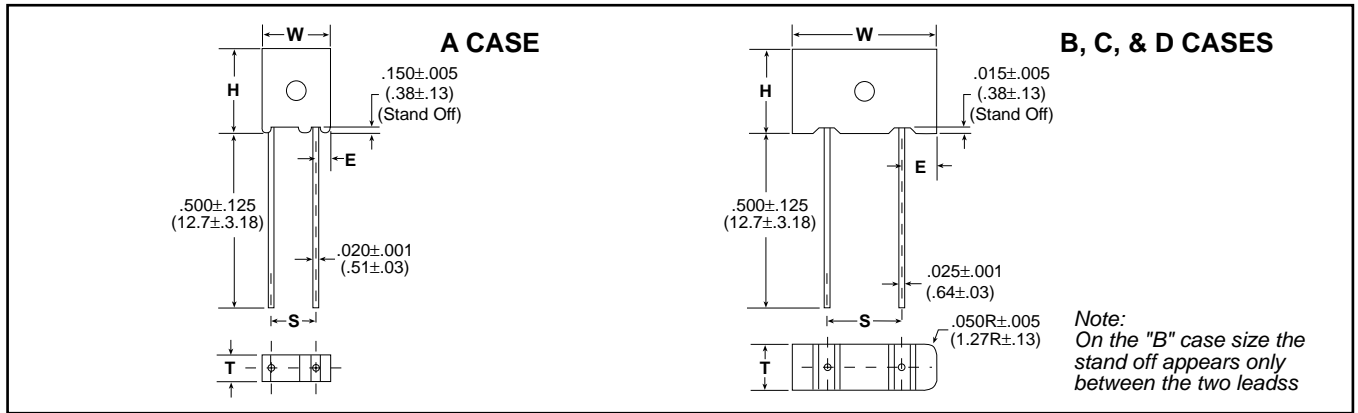
| Cap. μ F | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 25 Volt | 35 Volt | 50 Volt |
|--------------|--------|---------|---------|---------|---------|---------|---------|
| 0.10 | | | | | | 26.0 | 26.0 |
| 0.15 | | | | | | 21.0 | 21.0 |
| 0.22 | | | | | | 17.0 | 17.0 |
| 0.33 | | | | | | 15.0 | 15.0 |
| 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 | | | | | 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 | | | | | | |

| 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.

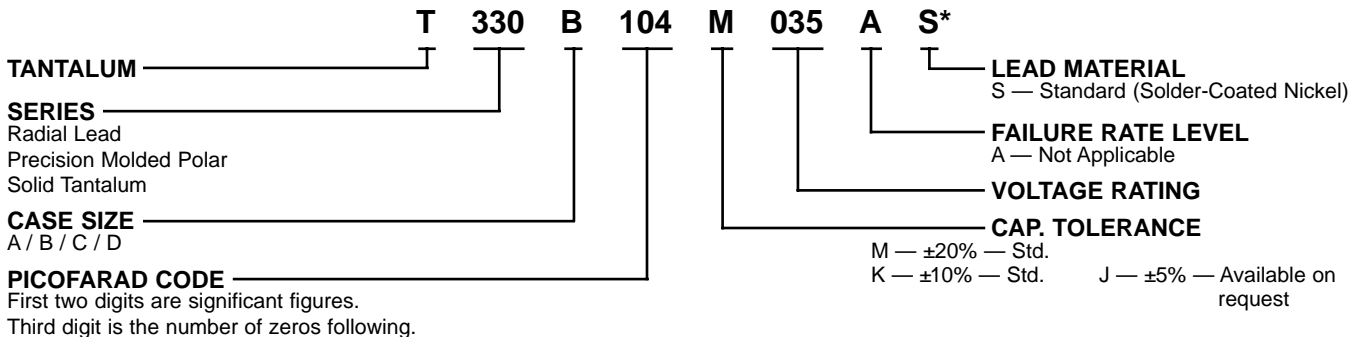
CAPACITOR OUTLINE DRAWINGS



DIMENSIONS — INCHES & (MILLIMETERS)

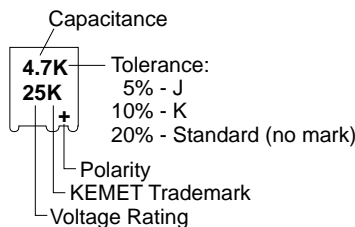
| CASE SIZE | H CASE HEIGHT | W CASE WIDTH | T CASE THICKNESS | E CASE TO WIRE | S LEAD SPACING |
|-----------|------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|
| A | .345 ± .008 (8.76 ± .203) | .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



***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 | 4 |
| 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)

| CAPACITANCE 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 |

| 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 | | | | |
| 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.

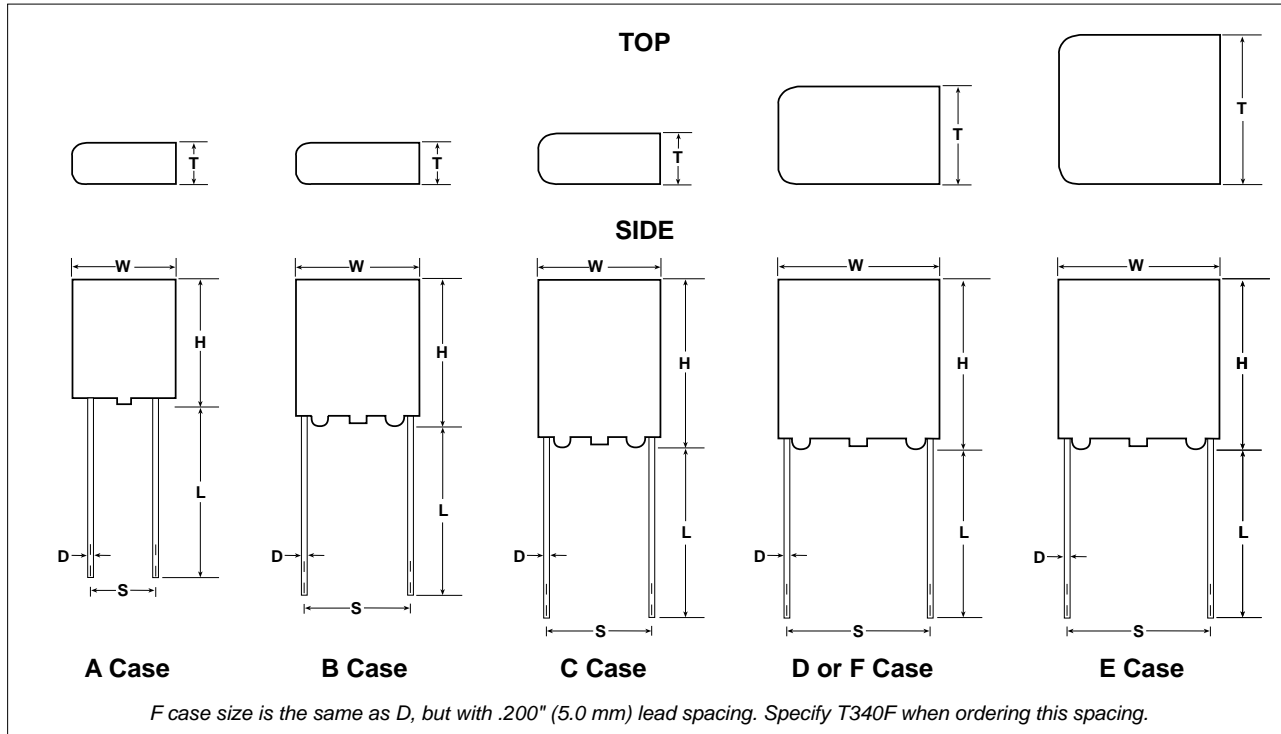
TANTALUM MOLDED / RADIAL

T340 SERIES - PRECISION MOLDED - RADIAL LEADS



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

CAPACITOR OUTLINE DRAWINGS



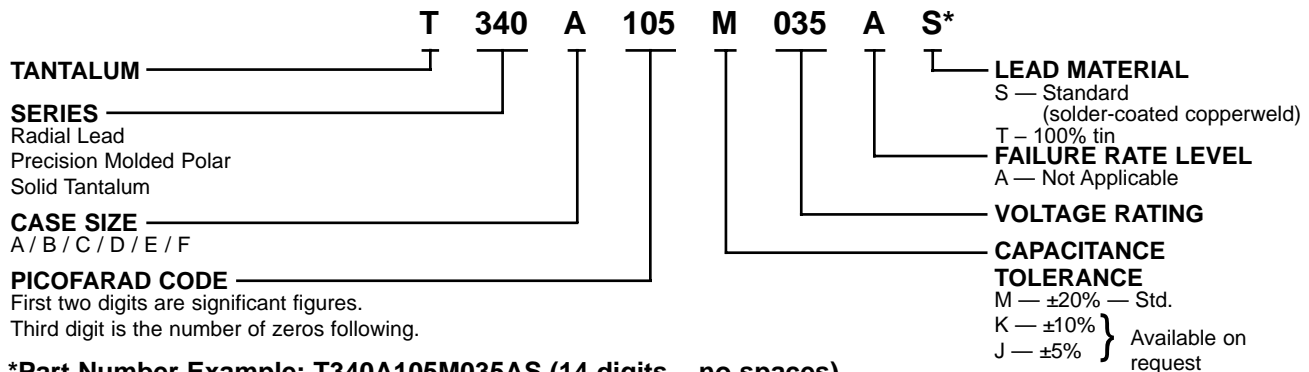
T340 Series Tantalum Molded / Radial

DIMENSIONS — INCHES & MILLIMETERS

| CASE SIZE | H** (MAX) | | W (MAX) | | T (MAX) | | LEAD SPACING S | | LEAD LENGTH L | | LEAD DIAMETER D | |
|-----------|-----------|------|---------|------|---------|------|----------------|------|---------------|------|-----------------|------|
| | H | | W | | T | | Inches | mm | Inches | mm | Inches | mm |
| | Inches | mm | Inches | mm | inches | mm | ±.020 | ±.5 | ±.078 | ±2.0 | ±.001 | ±.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.

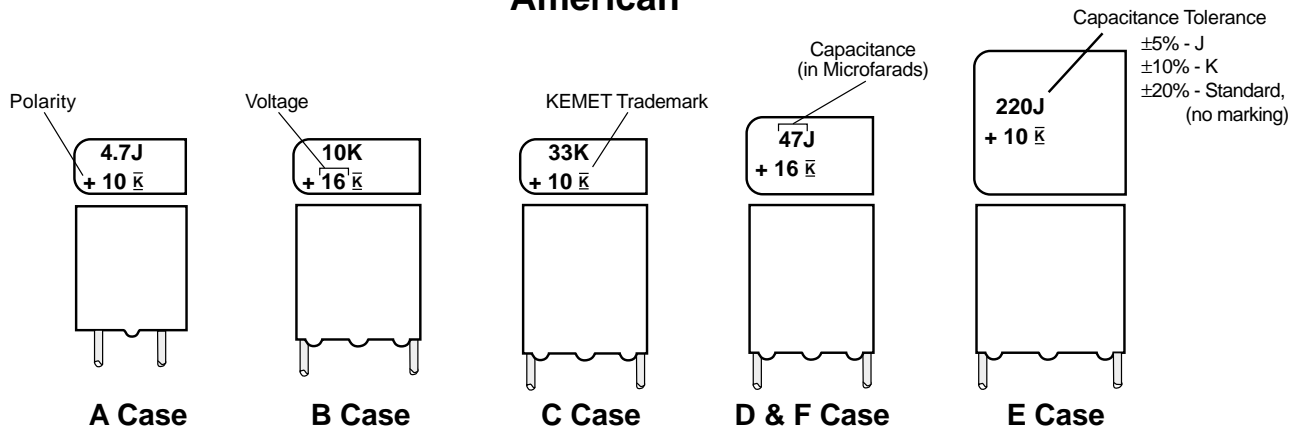
ORDERING INFORMATION



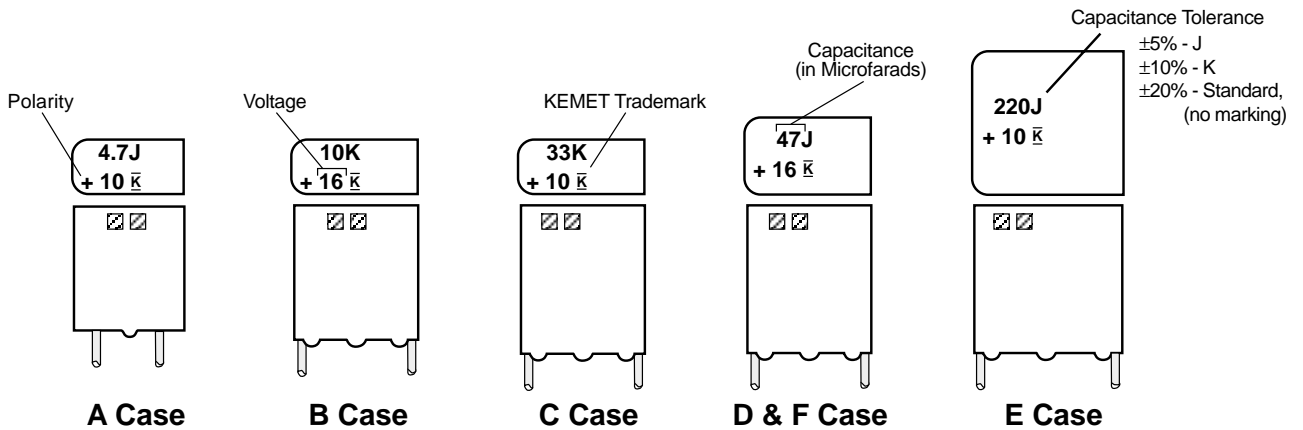
*Part Number Example: T340A105M035AS (14 digits – no spaces)

MARKING INFORMATION

American



European



□ □ = DIN. Specification Date Code

Insert Date Code as follows:

- | | |
|-------------------------------|--------------------------------|
| □ 1st digit - represents year | □ 2nd digit - represents month |
| L - 2000 | Q - 2005 |
| M - 2001 | R - 2006 |
| N - 2002 | S - 2007 |
| O - 2003 | T - 2008 |
| P - 2004 | U - 2009 |
| | 1 - 9 for January - September |
| | O for October |
| | N for November |
| | D for December |

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE 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.

T340 Series Tantalum
Molded / Radial

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE 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 | 2.5 |
| 15.0 | C | T340C156(1)015AS | 3.5 | 6 | |
| 18.0 | C | T340C186(1)015AS | 4.0 | 6 | |
| 22.0 | C | T340C226(1)015AS | 4.0 | 6 | |
| 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 | 1.3 |
| 47.0 | D/F | T340(2)476(1)015AS | 7.0 | 6 | |
| 56.0 | D/F | T340(2)566(1)015AS | 8.0 | 6 | |
| 68.0 | D/F | T340(2)686(1)015AS | 9.0 | 6 | |
| 82.0 | D/F | T340(2)826(1)015AS | 10.0 | 6 | 1.1 |
| 100.0 | E | T340E107(1)015AS | 10.0 | 6 | 0.8 |
| 150.0 | E | T340E157(1)015AS | 10.0 | 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 | 5.5 |
| 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 | |
| 5.6 | 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 | |
| 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 | 2.0 |
| 22.0 | D/F | T340(2)226(1)025AS | 5.5 | 6 | |
| 27.0 | D/F | T340(2)276(1)025AS | 7.0 | 6 | |
| 33.0 | D/F | T340(2)336(1)025AS | 8.0 | 6 | |
| 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 | |
| 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 | |
| 2.7 | B | T340B275(1)035AS | 1.0 | 6 | |
| 3.3 | B/C | T340(2)335(1)035AS | 1.0 | 6 | |

(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

| CAPACITANCE 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.

The KEMET Micron Series is available in a variety of case styles and sizes. They are designed to operate from -55°C to +85°C at full voltage and to +125°C with derating. Typical applications include use in bypass coupling, filtering, and timing circuits.

The KEMET Micron Series is qualified under MIL-PRF-49137/6 as military styles CX06 (T378 Series).

The KEMET T370 Series is encapsulated in a molded gold color epoxy. This encasement technique allows maximum utilization of circuit board real estate with precisely centered leads in a microminiature case.

These molded packages also provide significant improvements in overall dimensional consistency as well as lead wires precisely spaced to within .010 inches (.25mm).

With our new molded packaging design, these capacitors can now be marked using our laser printing technique. The KEMET laser marking system ensures legibility and permanency while offering a complete alphanumeric print format. Laser print meets all requirements of the Resistance to Solvents Test, method 215 of MIL-STD-202.

PERFORMANCE CHARACTERISTICS

- **CAPACITANCE/VOLTAGE RANGE:**
 T370 Series: 0.68-220µF, 3-35 Volts.
 T378 Series: 2.2-220µF, 3-35 Volts.
- **CAPACITANCE TOLERANCE:** Available in standard EIA nominal values with ±20% tolerance standard, +40% -20%, ±10% and ±5% are also available.
- **DISSIPATION FACTOR:** Maximum DF limits are shown in corresponding series part number listings on page 60. See Application Notes Section, page 76 for additional information.
- **DC LEAKAGE CURRENT:** Maximum leakage values at 25° are shown in part number listings, page 60. See Application Notes Section, page 76 for additional information.
- **RATED VOLTAGE; WORKING VOLTAGE; SURGE VOLTAGE; REVERSE VOLTAGE:** See Application Notes Section, pages 76 & 77 for description.
- **IMPEDANCE and ESR:** See Application Notes Section, pages 78 for description. Reference ESR values are listed in table below.
- **AC RIPPLE VOLTAGE:** Permissible AC ripple volt-

age is related to the 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.

• **ENVIRONMENTAL CONSIDERATIONS:**

| Case Size | Watts |
|-----------|-------|
| C | .070 |
| D | .080 |
| E | .090 |
| F | .100 |

Maximum Power Dissipation Capability @ 25°C

- A. Shock Test: MIL-STD-202, Method 213 Condition 1.
- 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 nickel per MIL-STD1266, type N32.
- **LEAD TAPE and REEL:** Reeling per specification RS-468. See pages 72 and 74 for additional information.

T370 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 T370 Series product.)

| Cap. µF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 25 Volt | 35 Volt |
|---------|--------|---------|---------|---------|---------|---------|
| 0.68 | | | | | | 10.0 |
| 1.00 | | | | | | 8.0 |
| 1.50 | | | | | | 6.0 |
| 2.20 | | | | | 6.0 | 5.0 |
| 3.30 | | | | 5.5 | 5.0 | 4.0 |
| 4.70 | | | | 4.5 | 4.0 | 3.0 |
| 6.80 | | 6.0 | | 3.6 | 3.1 | 2.5 |
| 10.0 | 6.0 | 5.0 | | 2.9 | 2.5 | 2.0 |
| 15.0 | 5.0 | 3.7 | 2.5 | 2.3 | 2.0 | 1.6 |
| 22.0 | 3.7 | 2.7 | 2.0 | 1.8 | 1.5 | 1.3 |
| 33.0 | 3.0 | 2.1 | 1.6 | 1.4 | 1.2 | |
| 47.0 | 2.0 | 1.7 | 1.3 | 1.2 | | |
| 68.0 | 1.8 | 1.3 | 1.0 | | | |
| 100.0 | 1.6 | 1.0 | | | | |
| 150.0 | 0.9 | | | | | |

CAPACITOR OUTLINE DRAWING

DIMENSIONS - INCHES (MILLIMETER)



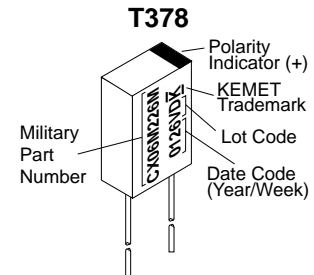
| CASE SIZE | H MAX. | W MAX. | T MAX. | S LEAD SPACING | LEAD DIAMETER ± .001 (.03) |
|-----------|--------------|-------------|-------------|--------------------------|----------------------------|
| *C | .225 (5.72) | .185 (4.70) | .075 (1.91) | .150 ± .010 (3.81 ± .25) | .016 (.41) |
| D | .290 (7.37) | .220 (5.59) | .110 (2.79) | .180 ± .010 (4.57 ± .25) | .016 (.41) |
| E | .310 (7.87) | .230 (5.84) | .130 (3.30) | .200 ± .010 (5.08 ± .25) | .016 (.41) |
| F | .475 (12.07) | .375 (9.53) | .150 (3.81) | .300 ± .010 (7.62 ± .25) | .016 (.41) |

*C case size T370 style only.

CAPACITOR MARKING

INDUSTRIAL PRODUCT

MILITARY PRODUCT

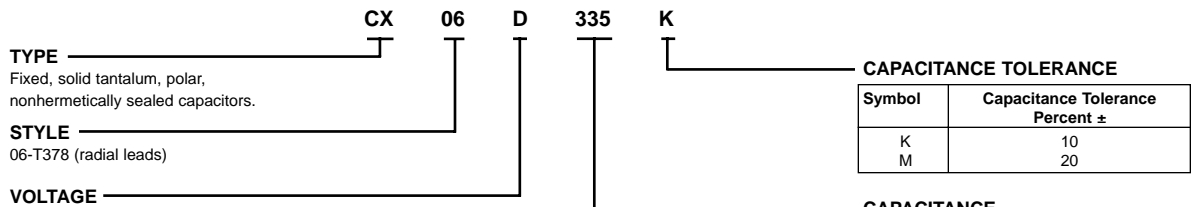


ORDERING INFORMATION
KEMET PART NUMBER



*Part Number Example: T370D475M035AS (14 digits – no spaces)

MIL-PRF-49137/6 PART NUMBER
CX06(T378) STYLE



| Symbol | Rated (85°C) Volts, dc | Surge (85°C) Volts, dc |
|--------|---------------------------|---------------------------|
| A | 2 | 2.6 |
| B | 3 | 4 |
| C | 4 | 5 |
| D | 6 | 8 |
| F | 10 | 13 |
| H | 15 | 20 |
| J | 20 | 26 |
| K | 25 | 32 |
| M | 35 | 46 |

The nominal capacitance value, expressed in picofarads (pF), is identified by a three digit number. The first two digits represent significant figures and the last digit specifies the number of zeros to follow.

T370/T378 Series Tantalum
Molded / Radial



TANTALUM MOLDED / RADIAL — MIL-PRF-49137/6

T370/T378 (CX06) SERIES

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | INDUSTRIAL PRODUCT T370 PART NO. | MILITARY PRODUCT | | DC LEAKAGE µA@25°C MAXIMUM | DISSIPATION FACTOR %@25°C 120HZ MAXIMUM |
|--|--------------|--|------------------|------------------|----------------------------------|---|
| | | | CX06 PART NO. | T378 PART NO. | | |
| 3 VOLT RATING AT 85°C—2.0 VOLT RATING AT 125°C | | | | | | |
| 220.0 | F | T370F227(1)003AS | CX06B227(2) | T378F227(3)003AS | 9.0 | 15 |
| 4 VOLT RATING AT 85°C—2.7 VOLT RATING AT 125°C | | | | | | |
| 15.0 | C | T370C156(1)004AS | | | 1.0 | 8 |
| 47.0 | D | T370D476(1)004AS | CX06C476(2) | T378D476(3)004AS | 2.0 | 8 |
| 68.0 | E | T370E686(1)004AS | CX06C686(2) | T378E686(3)004AS | 3.0 | 8 |
| 6 VOLT RATING AT 85°C—4.0 VOLT RATING AT 125°C | | | | | | |
| 10.0 | C | T370C106(1)006AS | | | 1.0 | 6 |
| 33.0 | D | T370D336(1)006AS | CX06D336(2) | T378D336(3)006AS | 2.0 | 6 |
| 47.0 | E | T370E476(1)006AS | CX06D476(2) | T378E476(3)006AS | 3.0 | 6 |
| 150.0 | F | T370F157(1)006AS | CX06D157(2) | T378F157(3)006AS | 9.0 | 10 |
| 10 VOLT RATING AT 85°C—7.0 VOLT RATING AT 125°C | | | | | | |
| 6.8 | C | T370C685(1)010AS | | | 1.0 | 6 |
| 22.0 | D | T370D226(1)010AS | CX06F226(2) | T378D226(3)010AS | 2.0 | 6 |
| 33.0 | E | T370E336(1)010AS | CX06F336(2) | T378E336(3)010AS | 3.0 | 6 |
| 100.0 | F | T370F107(1)010AS | CX06F107(2) | T378F107(3)010AS | 9.0 | 8 |
| 15 VOLT RATING AT 85°C—10 VOLT RATING AT 125°C | | | | | | |
| 15.0 | D | T370D156(1)015AS | CX06H156(2) | T378D156(3)015AS | 2.0 | 6 |
| 22.0 | E | T370E226(1)015AS | CX06H226(2) | T378E226(3)015AS | 3.0 | 6 |
| 68.0 | F | T370F686(1)015AS | CX06H686(2) | T378F686(3)015AS | 9.0 | 8 |
| 20 VOLT RATING AT 85°C—13 VOLT RATING AT 125°C | | | | | | |
| 3.3 | C | T370C335(1)020AS | | | 1.0 | 6 |
| 4.7 | C | T370C475(1)020AS | | | 1.0 | 6 |
| 10.0 | D | T370D106(1)020AS | CX06J106(2) | T378D106(3)020AS | 2.0 | 6 |
| 15.0 | E | T370E156(1)020AS | CX06J156(2) | T378E156(3)020AS | 3.0 | 6 |
| 47.0 | F | T370F476(1)020AS | CX06J476(2) | T378F476(3)020AS | 9.0 | 8 |
| 25 VOLT RATING AT 85°C—17 VOLT RATING AT 125°C | | | | | | |
| 2.2 | C | T370C225(1)025AS | | | 1.0 | 6 |
| 6.8 | D | T370D685(1)025AS | CX06K685(2) | T378D685(3)025AS | 2.0 | 6 |
| 10.0 | E | T370E106(1)025AS | CX06K106(2) | T378E106(3)025AS | 3.0 | 6 |
| 33.0 | F | T370F336(1)025AS | CX06K336(2) | T378F336(3)025AS | 9.0 | 6 |
| 35 VOLT RATING AT 85°C—23 VOLT RATING AT 125°C | | | | | | |
| 0.68 | C | T370C684(1)035AS | | | 1.0 | 6 |
| 1.0 | C | T370C105(1)035AS | | | 1.0 | 6 |
| 1.5 | C | T370C155(1)035AS | | | 1.0 | 6 |
| 2.2 | D | T370D225(1)035AS | CX06M225(2) | T378D225(3)035AS | 2.0 | 6 |
| 3.3 | D | T370D335(1)035AS | CX06M335(2) | T378D335(3)035AS | 2.0 | 6 |
| 4.7 | D | T370D475(1)035AS | CX06M475(2) | T378D475(3)035AS | 2.0 | 6 |
| 6.8 | E | T370E685(1)035AS | CX06M685(2) | T378E685(3)035AS | 3.0 | 6 |
| 10.0 | F | T370F106(1)035AS | CX06M106(2) | T378F106(3)035AS | 9.0 | 6 |
| 15.0 | F | T370F156(1)035AS | CX06M156(2) | T378F156(3)035AS | 9.0 | 6 |
| 22.0 | F | T370F226(1)035AS | CX06M226(2) | T378F226(3)035AS | 9.0 | 6 |

(1) To complete KEMET part number, insert capacitance tolerance symbol as follows: L = +40%, -20%; M = ±20%; K = ±10%; J = ±5%.
 (2) To complete military part number, insert capacitance tolerance symbol as follows: M = ±20%; K = ±10%.
 (3) To complete KEMET part number, insert capacitance tolerance symbol as follows: M = ±20%; K = ±10%.