

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:**
  - Shock Test: MIL-STD-202, Method 213.
  - Thermal Shock, MIL-STD-202, Method 107.
  - Moisture Resistance: MIL-STD-202, Method 106.
  - 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.)**

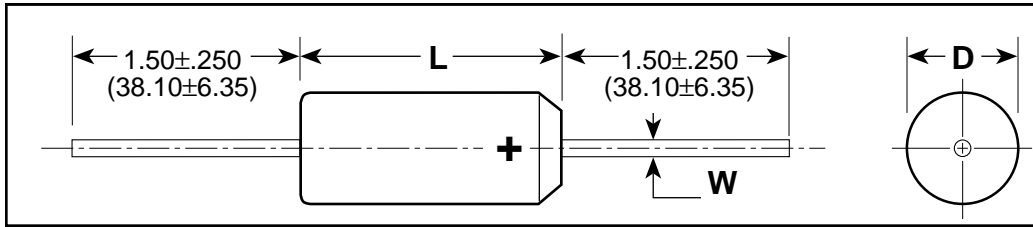
| Cap. μF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 25 Volt | 35 Volt | 50 Volt |
|---------|--------|---------|---------|---------|---------|---------|---------|
| 0.10    |        |         |         |         |         | 26.0    | 26.0    |
| 0.12    |        |         |         |         |         | 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.

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%

**LEAD MATERIAL** — 035  
S — Standard  
T — 100% Tin

**FAILURE RATE LEVEL** — A  
A — Not Applicable

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

**\*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

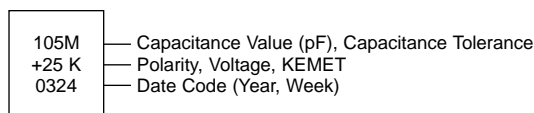
**VOLTAGE** — D  
D — 225  
K — Capacitance Tolerance

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

(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<br>µF  | CASE<br>SIZE | CAPACITANCE<br>TOLERANCE<br>±% | KEMET T322 SERIES       |                             |  | CX01 & CX05 CAPACITORS<br>PER MIL-PRF-49137/1 & 5 |                      |
|--|--------------|--------------------------------|-------------------------|-----------------------------|--|---|----------------------|
|  |              |                                | KEMET<br>PART NUMBER    | D. C.<br>LEAKAGE<br>µA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120 HZ | MILITARY<br>PART NUMBER                           | KEMET<br>PART NUMBER |
| <b>6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C (Cont'd)</b> |              |                                |                         |                             |  |   |                      |
| 82.0   | E            | 5,10,20                        | T322E826(1)006AS        | 3.9                         | 8  |   |                      |
| <b>100.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E107(1)006AS</b> | <b>4.8</b>                  | <b>8</b>   |   |                      |
| 120.0  | E            | 5,10,20                        | T322E127(1)006AS        | 5.0                         | 8  |   |                      |
| <b>150.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E157(1)006AS</b> | <b>5.0</b>                  | <b>8</b>   |   |                      |
| 180.0  | E            | 5,10,20                        | T322E187(1)006AS        | 8.6                         | 8  |   |                      |
| <b>220.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E227(1)006AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                      |
| 270.0  | F            | 5,10,20                        | T322F277(1)006AS        | 10.0                        | 8  |   |                      |
| <b>330.0</b>   | <b>F</b>     | <b>5,10,20</b>                 | <b>T322F337(1)006AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                      |
| <b>10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C</b>         |              |                                |                         |                             |  |   |                      |
| <b>2.2</b>   | <b>A</b>     | <b>5,10,20</b>                 | <b>T322A225(1)010AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                      |
| 2.7  | A            | 5,10,20                        | T322A275(1)010AS        | 0.5                         | 4  |   |                      |
| <b>3.3</b>   | <b>A</b>     | <b>5</b>                       | <b>T322A335J010AS</b>   | <b>0.5</b>                  | <b>4</b>   |   |                      |
| <b>3.3</b>   | <b>A</b>     | <b>10</b>                      | <b>T322A335K010AS</b>   | <b>0.5</b>                  | <b>4</b>   | CX05F335K   | T323A335K010AS       |
| <b>3.3</b>   | <b>A</b>     | <b>20</b>                      | <b>T322A335M010AS</b>   | <b>0.5</b>                  | <b>4</b>   | CX05F335M   | T323A335M010AS       |
| 3.9  | B            | 5,10,20                        | T322B395(1)010AS        | 0.5                         | 4  |   |                      |
| <b>4.7</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B475(1)010AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                      |
| 5.6  | B            | 5,10,20                        | T322B565(1)010AS        | 0.5                         | 4  |   |                      |
| <b>6.8</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B685(1)010AS</b> | <b>0.5</b>                  | <b>6</b>   |   |                      |
| 8.2  | B            | 5,10,20                        | T322B825(1)010AS        | 0.7                         | 6  |   |                      |
| <b>10.0</b>  | <b>B</b>     | <b>5</b>                       | <b>T322B106J010AS</b>   | <b>0.8</b>                  | <b>6</b>   |   |                      |
| <b>10.0</b>  | <b>B</b>     | <b>10</b>                      | <b>T322B106K010AS</b>   | <b>0.8</b>                  | <b>6</b>   | CX05F106K   | T323B106K010AS       |
| <b>10.0</b>  | <b>B</b>     | <b>20</b>                      | <b>T322B106M010AS</b>   | <b>0.8</b>                  | <b>6</b>   | CX05F106M   | T323B106M010AS       |
| 12.0   | C            | 5,10,20                        | T322C126(1)010AS        | 1.0                         | 6  |   |                      |
| <b>15.0</b>  | <b>C</b>     | <b>5,10,20</b>                 | <b>T322C156(1)010AS</b> | <b>1.2</b>                  | <b>6</b>   |   |                      |
| 18.0   | C            | 5,10,20                        | T322C186(1)010AS        | 1.4                         | 6  |   |                      |
| <b>22.0</b>  | <b>C</b>     | <b>5</b>                       | <b>T322C226J010AS</b>   | <b>1.5</b>                  | <b>6</b>   |   |                      |
| <b>22.0</b>  | <b>C</b>     | <b>10</b>                      | <b>T322C226K010AS</b>   | <b>1.5</b>                  | <b>6</b>   | CX05F226K   | T323C226K010AS       |
| <b>22.0</b>  | <b>C</b>     | <b>20</b>                      | <b>T322C226M010AS</b>   | <b>1.5</b>                  | <b>6</b>   | 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       |
| <b>33.0</b>  | <b>D</b>     | <b>5</b>                       | <b>T322D336J010AS</b>   | <b>2.6</b>                  | <b>6</b>   |   |                      |
| <b>33.0</b>  | <b>D</b>     | <b>10</b>                      | <b>T322D336K010AS</b>   | <b>2.6</b>                  | <b>6</b>   | CX05F336K   | T323D336K010AS       |
| <b>33.0</b>  | <b>D</b>     | <b>20</b>                      | <b>T322D336M010AS</b>   | <b>2.6</b>                  | <b>6</b>   | 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       |
| <b>47.0</b>  | <b>D</b>     | <b>5</b>                       | <b>T322D476J010AS</b>   | <b>3.8</b>                  | <b>6</b>   |   |                      |
| <b>47.0</b>  | <b>D</b>     | <b>10</b>                      | <b>T322D476K010AS</b>   | <b>3.8</b>                  | <b>6</b>   | CX05F476K   | T323D476K010AS       |
| <b>47.0</b>  | <b>D</b>     | <b>20</b>                      | <b>T322D476M010AS</b>   | <b>3.8</b>                  | <b>6</b>   | CX05F476M   | T323D476M010AS       |
| 56.0   | E            | 5,10,20                        | T322E566(1)010AS        | 4.4                         | 6  |   |                      |
| <b>68.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E686(1)010AS</b> | <b>5.0</b>                  | <b>6</b>   |   |                      |
| 82.0   | E            | 5,10,20                        | T322E826(1)010AS        | 5.0                         | 8  |   |                      |
| <b>100.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E107(1)010AS</b> | <b>8.0</b>                  | <b>8</b>   |   |                      |
| 120.0  | E            | 5,10,20                        | T322E127(1)010AS        | 9.6                         | 8  |   |                      |
| <b>150.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E157(1)010AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                      |
| 180.0  | F            | 5,10,20                        | T322F187(1)010AS        | 10.0                        | 8  |   |                      |
| <b>220.0</b>   | <b>F</b>     | <b>5,10,20</b>                 | <b>T322F227(1)010AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                      |
| <b>15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C</b>        |              |                                |                         |                             |  |   |                      |
| <b>1.5</b>   | <b>A</b>     | <b>5,10,20</b>                 | <b>T322A155(1)015AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                      |
| 1.8  | A            | 5,10,20                        | T322A185(1)015AS        | 0.5                         | 4  |   |                      |
| <b>2.2</b>   | <b>A</b>     | <b>5</b>                       | <b>T322A225J015AS</b>   | <b>0.5</b>                  | <b>4</b>   |   |                      |
| <b>2.2</b>   | <b>A</b>     | <b>10</b>                      | <b>T322A225K015AS</b>   | <b>0.5</b>                  | <b>4</b>   | CX05H225K   | T323A225K015AS       |
| <b>2.2</b>   | <b>A</b>     | <b>20</b>                      | <b>T322A225M015AS</b>   | <b>0.5</b>                  | <b>4</b>   | CX05H225M   | T323A225M015AS       |
| 2.7  | B            | 5,10,20                        | T322B275(1)015AS        | 0.5                         | 4  |   |                      |
| <b>3.3</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B335(1)015AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                      |
| 3.9  | B            | 5,10,20                        | T322B395(1)015AS        | 0.5                         | 4  |   |                      |
| <b>4.7</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B475(1)015AS</b> | <b>0.6</b>                  | <b>4</b>   |   |                      |
| 5.6  | B            | 5,10,20                        | T322B565(1)015AS        | 0.7                         | 4  |   |                      |
| <b>6.8</b>   | <b>B</b>     | <b>5</b>                       | <b>T322B685J015AS</b>   | <b>0.8</b>                  | <b>6</b>   |   |                      |
| <b>6.8</b>   | <b>B</b>     | <b>10</b>                      | <b>T322B685K015AS</b>   | <b>0.8</b>                  | <b>6</b>   | CX05H685K   | T323B685K015AS       |
| <b>6.8</b>   | <b>B</b>     | <b>20</b>                      | <b>T322B685M015AS</b>   | <b>0.8</b>                  | <b>6</b>   | CX05H685M   | T323B685M015AS       |
| 8.2  | C            | 5,10,20                        | T322C825(1)015AS        | 1.0                         | 6  |   |                      |
| <b>10.0</b>  | <b>C</b>     | <b>5,10,20</b>                 | <b>T322C106(1)015AS</b> | <b>1.2</b>                  | <b>6</b>   |   |                      |
| 12.0   | C            | 5,10,20                        | T322C126(1)015AS        | 1.4                         | 6  |   |                      |
| <b>15.0</b>  | <b>C</b>     | <b>5</b>                       | <b>T322C156J015AS</b>   | <b>1.5</b>                  | <b>6</b>   |   |                      |
| <b>15.0</b>  | <b>C</b>     | <b>10</b>                      | <b>T322C156K015AS</b>   | <b>1.5</b>                  | <b>6</b>   | CX05H156K   | T323C156K015AS       |
| <b>15.0</b>  | <b>C</b>     | <b>20</b>                      | <b>T322C156M015AS</b>   | <b>1.5</b>                  | <b>6</b>   | 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<br>µF  | CASE<br>SIZE | CAPACITANCE<br>TOLERANCE<br>±% | KEMET T322 SERIES       |                             |  | CX01 & CX05 CAPACITORS<br>PER MIL-PRF-49137/1 & 5 |                       |
|--|--------------|--------------------------------|-------------------------|-----------------------------|--|---|-----------------------|
|  |              |                                | KEMET<br>PART NUMBER    | D. C.<br>LEAKAGE<br>µA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120 HZ | MILITARY<br>PART NUMBER                           | KEMET<br>PART NUMBER  |
| <b>15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C (Cont'd)</b> |              |                                |                         |                             |  |   |                       |
| 18.0   | D            | 5,10,20                        | T322D186(1)015AS        | 2.2                         | 6  |   |                       |
| <b>22.0</b>  | <b>D</b>     | <b>5</b>                       | <b>T322D226J015AS</b>   | <b>2.6</b>                  | <b>6</b>   |   |                       |
| <b>22.0</b>  | <b>D</b>     | <b>10</b>                      | <b>T322D226K015AS</b>   | <b>2.6</b>                  | <b>6</b>   | <b>CX05H226K</b>                                  | <b>T323D226K015AS</b> |
| <b>22.0</b>  | <b>D</b>     | <b>20</b>                      | <b>T322D226M015AS</b>   | <b>2.6</b>                  | <b>6</b>   | <b>CX05H226M</b>                                  | <b>T323D226M015AS</b> |
| 27.0   | D            | 5,10,20                        | T322D276(1)015AS        | 3.2                         | 6  |   |                       |
| <b>33.0</b>  | <b>D</b>     | <b>5</b>                       | <b>T322D336J015AS</b>   | <b>4.0</b>                  | <b>6</b>   |   |                       |
| <b>33.0</b>  | <b>D</b>     | <b>10</b>                      | <b>T322D336K015AS</b>   | <b>4.0</b>                  | <b>6</b>   | <b>CX05H336K</b>                                  | <b>T323D336K015AS</b> |
| <b>33.0</b>  | <b>D</b>     | <b>20</b>                      | <b>T322D336M015AS</b>   | <b>4.0</b>                  | <b>6</b>   | <b>CX05H336M</b>                                  | <b>T323E336M015AS</b> |
| 39.0   | E            | 5,10,20                        | T322E396(1)015AS        | 4.7                         | 6  |   |                       |
| <b>47.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E476(1)015AS</b> | <b>5.0</b>                  | <b>6</b>   |   |                       |
| <b>56.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E566(1)015AS</b> | <b>6.7</b>                  | <b>6</b>   |   |                       |
| <b>68.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E686(1)015AS</b> | <b>8.2</b>                  | <b>6</b>   |   |                       |
| 82.0   | E            | 5,10,20                        | T322E826(1)015AS        | 9.8                         | 8  |   |                       |
| <b>100.0</b>   | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E107(1)015AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                       |
| 120.0  | F            | 5,10,20                        | T322F127(1)015AS        | 10.0                        | 8  |   |                       |
| <b>150.0</b>   | <b>F</b>     | <b>5,10,20</b>                 | <b>T322F157(1)015AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                       |
| <b>20 VOLT RATING AT 85°C — 13 VOLT RATING AT 125°C</b>          |              |                                |                         |                             |  |   |                       |
| <b>1.0</b>   | <b>A</b>     | <b>5,10,20</b>                 | <b>T322A105(1)020AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                       |
| 1.2  | A            | 5,10,20                        | T322A125(1)020AS        | 0.5                         | 4  |   |                       |
| <b>1.5</b>   | <b>A</b>     | <b>5</b>                       | <b>T322A155J020AS</b>   | <b>0.5</b>                  | <b>4</b>   |   |                       |
| <b>1.5</b>   | <b>A</b>     | <b>10</b>                      | <b>T322A155K020AS</b>   | <b>0.5</b>                  | <b>4</b>   | <b>CX05J155K</b>                                  | <b>T323A155K020AS</b> |
| <b>1.5</b>   | <b>A</b>     | <b>20</b>                      | <b>T322A155M020AS</b>   | <b>0.5</b>                  | <b>4</b>   | <b>CX05J155M</b>                                  | <b>T323A155M020AS</b> |
| 1.8  | B            | 5,10,20                        | T322B185(1)020AS        | 0.5                         | 4  |   |                       |
| <b>2.2</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B225(1)020AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                       |
| 2.7  | B            | 5,10,20                        | T322B275(1)020AS        | 0.5                         | 4  |   |                       |
| <b>3.3</b>   | <b>B</b>     | <b>5,10,20</b>                 | <b>T322B335(1)020AS</b> | <b>0.5</b>                  | <b>4</b>   |   |                       |
| 3.9  | B            | 5,10,20                        | T322B395(1)020AS        | 0.6                         | 4  |   |                       |
| <b>4.7</b>   | <b>B</b>     | <b>5</b>                       | <b>T322B475J020AS</b>   | <b>0.8</b>                  | <b>4</b>   |   |                       |
| <b>4.7</b>   | <b>B</b>     | <b>10</b>                      | <b>T322B475K020AS</b>   | <b>0.8</b>                  | <b>4</b>   | <b>CX05J475K</b>                                  | <b>T323B475K020AS</b> |
| <b>4.7</b>   | <b>B</b>     | <b>20</b>                      | <b>T322B475M020AS</b>   | <b>0.8</b>                  | <b>4</b>   | <b>CX05J475M</b>                                  | <b>T323B475M020AS</b> |
| 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  |   |                       |
| <b>10.0</b>  | <b>C</b>     | <b>5,10,20</b>                 | <b>T322C106(1)020AS</b> | <b>1.6</b>                  | <b>6</b>   |   |                       |
| 12.0   | D            | 5                              | T322D126J020AS          | 1.9                         | 6  |   |                       |
| 12.0   | D            | 10                             | T322D126K020AS          | 1.9                         | 6  | <b>CX05J126K</b>                                  | <b>T323D126K020AS</b> |
| 12.0   | D            | 20                             | T322D126M020AS          | 1.9                         | 6  | <b>CX05J126M</b>                                  | <b>T323D126M020AS</b> |
| <b>15.0</b>  | <b>D</b>     | <b>5</b>                       | <b>T322D156J020AS</b>   | <b>2.4</b>                  | <b>6</b>   |   |                       |
| <b>15.0</b>  | <b>D</b>     | <b>10</b>                      | <b>T322D156K020AS</b>   | <b>2.4</b>                  | <b>6</b>   | <b>CX05J156K</b>                                  | <b>T323D156K020AS</b> |
| <b>15.0</b>  | <b>D</b>     | <b>20</b>                      | <b>T322D156M020AS</b>   | <b>2.4</b>                  | <b>6</b>   | <b>CX05J156M</b>                                  | <b>T323D156M020AS</b> |
| 18.0   | D            | 5,10,20                        | T322D186(1)020AS        | 2.9                         | 6  |   |                       |
| <b>22.0</b>  | <b>D</b>     | <b>5,10,20</b>                 | <b>T322D226(1)020AS</b> | <b>3.5</b>                  | <b>6</b>   |   |                       |
| 27.0   | E            | 5,10,20                        | T322E276(1)020AS        | 4.3                         | 6  |   |                       |
| <b>33.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E336(1)020AS</b> | <b>5.0</b>                  | <b>6</b>   |   |                       |
| 39.0   | E            | 5,10,20                        | T322E396(1)020AS        | 6.2                         | 6  |   |                       |
| <b>47.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E476(1)020AS</b> | <b>7.5</b>                  | <b>6</b>   |   |                       |
| 56.0   | E            | 5,10,20                        | T322E566(1)020AS        | 8.9                         | 6  |   |                       |
| <b>68.0</b>  | <b>E</b>     | <b>5,10,20</b>                 | <b>T322E686(1)020AS</b> | <b>10.0</b>                 | <b>6</b>   |   |                       |
| 82.0   | F            | 5,10,20                        | T322F826(1)020AS        | 10.0                        | 8  |   |                       |
| <b>100.0</b>   | <b>F</b>     | <b>5,10,20</b>                 | <b>T322F107(1)020AS</b> | <b>10.0</b>                 | <b>8</b>   |   |                       |
| <b>25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C</b>          |              |                                |                         |                             |  |   |                       |
| <b>0.47</b>  | <b>A</b>     | <b>5,10,20</b>                 | <b>T322A474(1)025AS</b> | <b>0.5</b>                  | <b>3</b>   |   |                       |
| 0.56   | A            | 5,10,20                        | T322A564(1)025AS        | 0.5                         | 3  |   |                       |
| <b>0.68</b>  | <b>A</b>     | <b>5,10,20</b>                 | <b>T322A684(1)025AS</b> | <b>0.5</b>                  | <b>3</b>   |   |                       |
| 0.82   | A            | 5,10,20                        | T322A824(1)025AS        | 0.5                         | 3  |   |                       |
| <b>1.0</b>   | <b>A</b>     | <b>5</b>                       | <b>T322A105J025AS</b>   | <b>0.5</b>                  | <b>3</b>   |   |                       |
| <b>1.0</b>   | <b>A</b>     | <b>10</b>                      | <b>T322A105K025AS</b>   | <b>0.5</b>                  | <b>3</b>   | <b>CX05K105K</b>                                  | <b>T323A105K025AS</b> |
| <b>1.0</b>   | <b>A</b>     | <b>20</b>                      | <b>T322A105M025AS</b>   | <b>0.5</b>                  | <b>3</b>   | <b>CX05K105M</b>                                  | <b>T323A105M025AS</b> |
| 1.2  | B            | 5,10,20                        | T322B125(1)025AS        | 0.5                         | 3  |   |                       |
| <b>1.5</b>   | <b>B</b>     | <b>5</b>                       | <b>T322B155J025AS</b>   | <b>0.5</b>                  | <b>3</b>   |   |                       |
| <b>1.5</b>   | <b>B</b>     | <b>10</b>                      | <b>T322B155K025AS</b>   | <b>0.5</b>                  | <b>3</b>   | <b>CX01K155K</b>                                  | <b>T323B155K025AS</b> |
| <b>1.5</b>   | <b>B</b>     | <b>20</b>                      | <b>T322B155M025AS</b>   | <b>0.5</b>                  | <b>3</b>   | <b>CX01K155M</b>                                  | <b>T323B155M020AS</b> |
| 1.8  | B            | 5                              | T322B185J025AS          | 0.5                         | 3  |   |                       |
| 1.8  | B            | 10                             | T322B185K025AS          | 0.5                         | 3  | <b>CX01K185K</b>                                  | <b>T323B185K025AS</b> |
| 1.8  | B            | 20                             | T322B185M025AS          | 0.5                         | 3  | <b>CX01K185M</b>                                  | <b>T323B185M025AS</b> |
| <b>2.2</b>   | <b>B</b>     | <b>5</b>                       | <b>T322B225J025AS</b>   | <b>0.5</b>                  | <b>3</b>   |   |                       |
| <b>2.2</b>   | <b>B</b>     | <b>10</b>                      | <b>T322B225K025AS</b>   | <b>0.5</b>                  | <b>3</b>   | <b>CX05K225K</b>                                  | <b>T323B225K025AS</b> |

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

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

(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  $\pm 20$ ,  $\pm 10$ ,  $\pm 5\%$  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 $\mu$ F, 6-50 Volts.  
 T340: 0.1-330 $\mu$ 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. $\mu$ 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         |        |         |         | 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    |         |         |         |         |         |         |

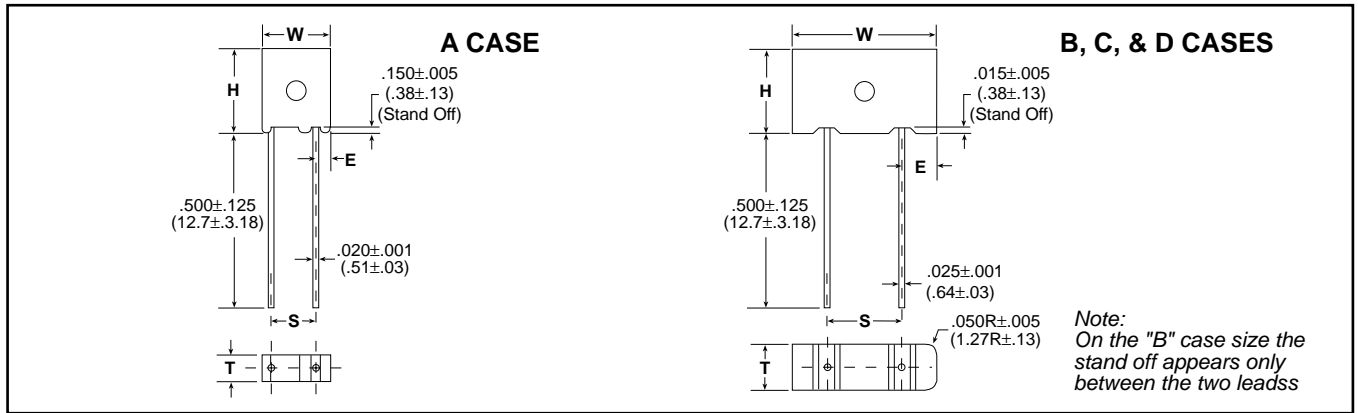
| Series    | Case Size | Watts |
|-----------|-----------|-------|
| T330/T340 | A         | .09   |
|           | B         | .09   |
|           | C         | .100  |
| T330      | D         | .125  |
|           | T340 only |       |
|           | D/F       | .125  |
|           | E         | .180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

**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.



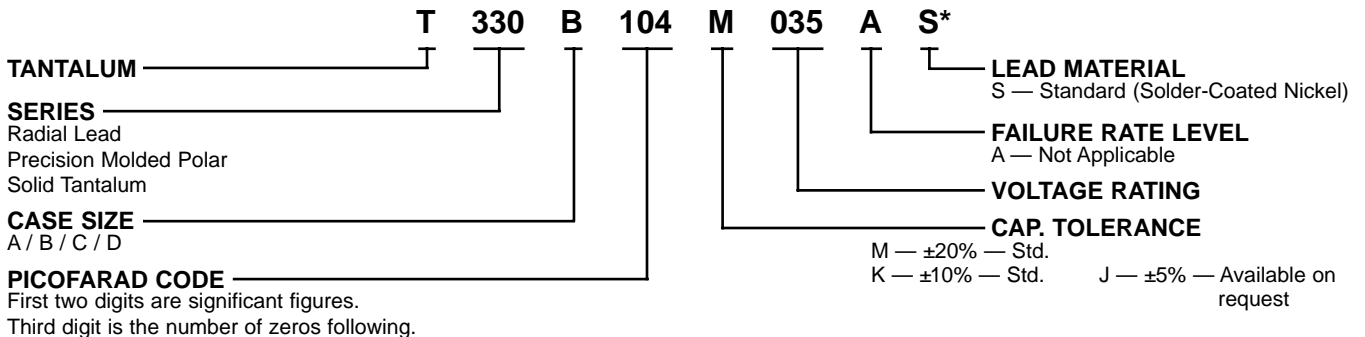
### CAPACITOR OUTLINE DRAWINGS



### DIMENSIONS — INCHES & (MILLIMETERS)

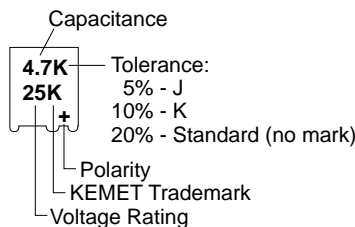
| CASE SIZE | H CASE HEIGHT                | W CASE WIDTH                  | T CASE THICKNESS             | E CASE TO WIRE               | S LEAD SPACING               |
|-----------|------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|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

### ORDERING INFORMATION



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

### MARKING INFORMATION



RATINGS & PART NUMBER REFERENCE

A CASE

| CAPACITANCE<br>μF                                       | CASE<br>SIZE | KEMET PART NUMBER       | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|---|--------------|-------------------------|----------------------------|---|
| <b>6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C</b>   |              |                         |                            |   |
| 18.0  | A            | T330A186(1)006AS        | 1                          | 6   |
| <b>22.0</b>   | <b>A</b>     | <b>T330A226(1)006AS</b> | <b>1</b>                   | <b>6</b>  |
| <b>10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C</b>  |              |                         |                            |   |
| <b>10.0</b>   | <b>A</b>     | <b>T330A106(1)010AS</b> | <b>1</b>                   | <b>6</b>  |
| 12.0  | A            | T330A126(1)010AS        | 1                          | 6   |
| 15.0  | A            | T330A156(1)010AS        | 1                          | 6   |
| <b>15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 8.2   | A            | T330A825(1)015AS        | 1                          | 6   |
| <b>20 VOLT RATING AT 85°C — 13 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 5.6   | A            | T330A565(1)020AS        | 1                          | 6   |
| <b>6.8</b>  | <b>A</b>     | <b>T330A685(1)020AS</b> | <b>1</b>                   | <b>6</b>  |
| <b>25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 3.3   | A            | T330A335(1)025AS        | 1                          | 4   |
| 3.9   | A            | T330A395(1)025AS        | 1                          | 4   |
| <b>4.7</b>  | <b>A</b>     | <b>T330A475(1)025AS</b> | <b>1</b>                   | <b>4</b>  |
| <b>35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 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<br>μF                                       | CASE<br>SIZE | KEMET PART NUMBER       | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|---|--------------|-------------------------|----------------------------|---|
| <b>35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 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   |
| <b>1.0</b>  | <b>A</b>     | <b>T330A105(1)035AS</b> | <b>1</b>                   | <b>3</b>  |
| 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   |
| <b>2.7</b>  | <b>A</b>     | <b>T330A275(1)035AS</b> | <b>1</b>                   | <b>4</b>  |
| <b>50 VOLT RATING AT 85°C — 33 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 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<br>μF                                      | CASE<br>SIZE | KEMET PART NUMBER | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|--|--------------|-------------------|----------------------------|---|
| <b>6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C</b>  |              |                   |                            |   |
| 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   |
| <b>10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C</b> |              |                   |                            |   |
| 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<br>μF                                       | CASE<br>SIZE | KEMET PART NUMBER | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|---|--------------|-------------------|----------------------------|---|
| <b>10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C</b>  |              |                   |                            |   |
| 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   |
| <b>15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C</b> |              |                   |                            |   |
| 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<br>μF                                       | CASE<br>SIZE | KEMET PART NUMBER       | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|---|--------------|-------------------------|----------------------------|---|
| <b>25 VOLT RATING AT 85°C — 17 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 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   |
| <b>47.0</b>   | <b>D</b>     | <b>T330D476(1)025AS</b> | <b>10</b>                  | <b>6</b>  |
| <b>35 VOLT RATING AT 85°C—23 VOLT RATING AT 125°C</b>   |              |                         |                            |   |
| 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<br>μF                                       | CASE<br>SIZE | KEMET PART NUMBER       | D.C.<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120Hz |
|---|--------------|-------------------------|----------------------------|---|
| <b>35 VOLT RATING AT 85°C — 23 VOLT RATING AT 125°C</b> |              |                         |                            |   |
| 6.8   | C            | T330C685(1)035AS        | 2                          | 6   |
| 8.2   | C            | T330C825(1)035AS        | 5                          | 6   |
| <b>10.0</b>   | <b>C</b>     | <b>T330C106(1)035AS</b> | <b>5</b>                   | <b>6</b>  |
| 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   |
| <b>50 VOLT RATING AT 85°C—33 VOLT RATING AT 125°C</b>   |              |                         |                            |   |
| 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.

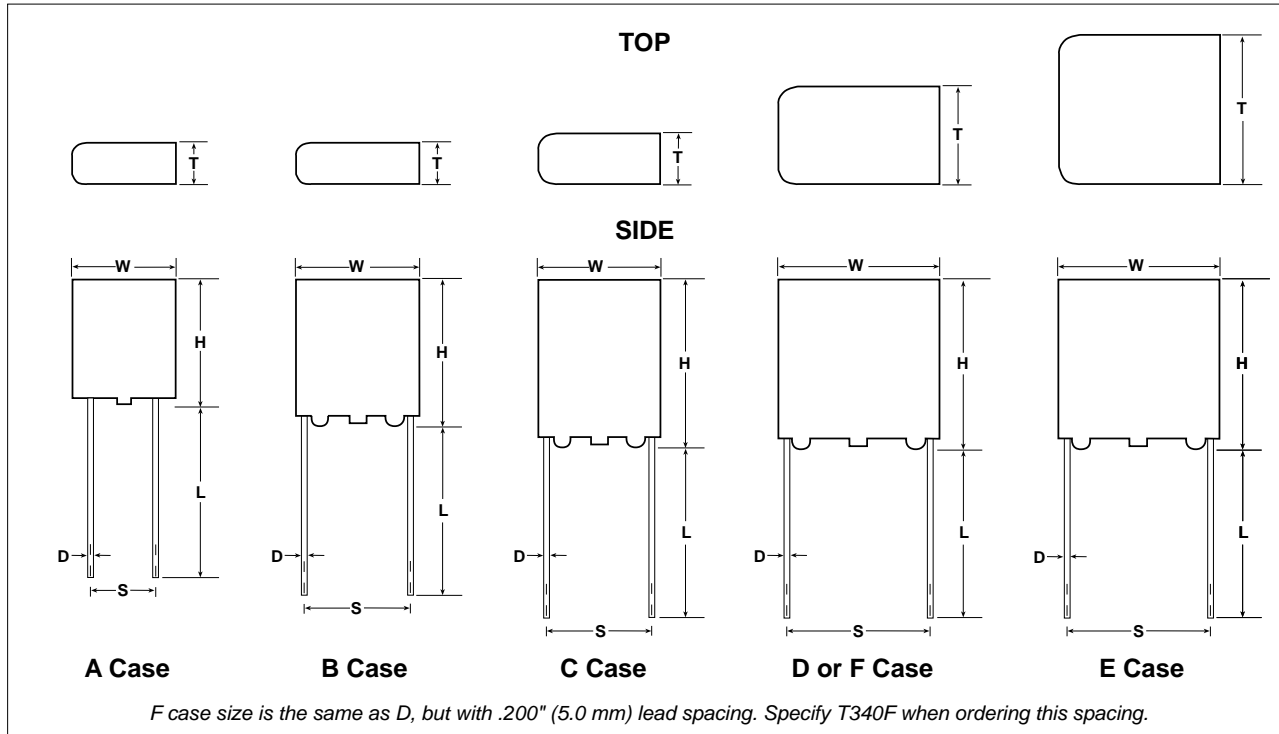
# TANTALUM MOLDED / RADIAL

## T340 SERIES - PRECISION MOLDED - RADIAL LEADS



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

### CAPACITOR OUTLINE DRAWINGS



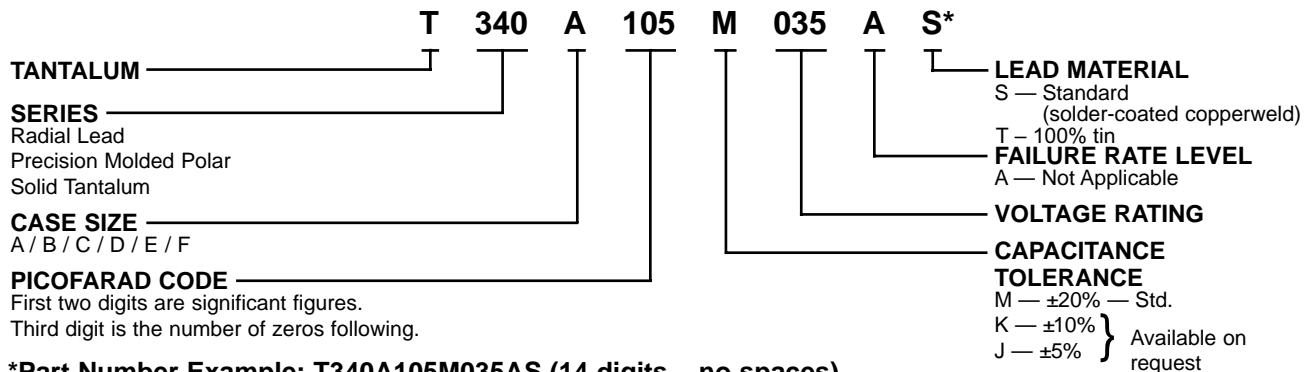
T340 Series Tantalum Molded / Radial

### 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.

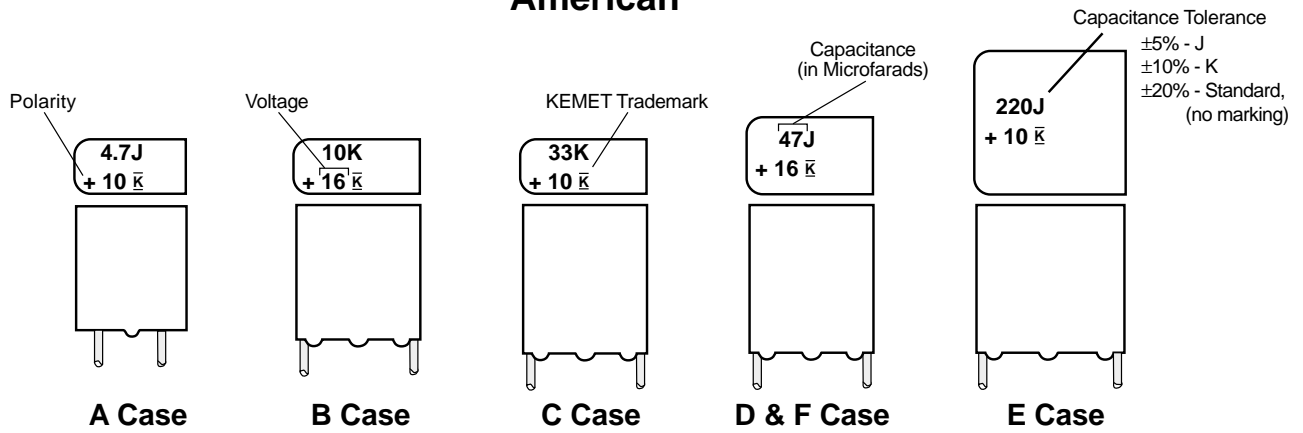
### ORDERING INFORMATION



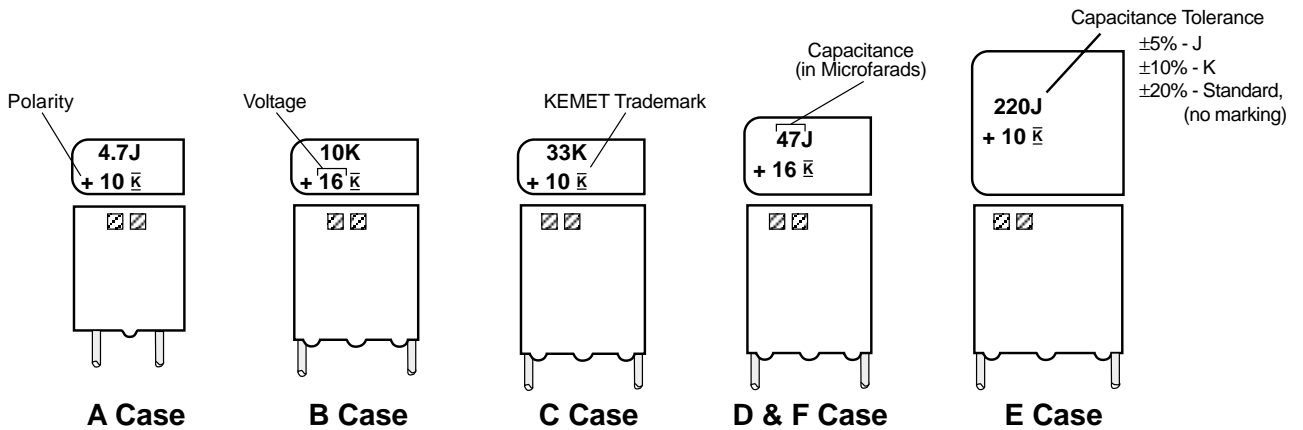
\*Part Number Example: T340A105M035AS (14 digits – no spaces)

### 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<br>μF                                   | CASE<br>SIZE | KEMET<br>PART NUMBER      | MAX.<br>DC<br>LEAKAGE<br>μA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120 HZ | MAX.<br>IMPEDANCE<br>Ω@<br>10 kHz |
|---|--------------|---------------------------|----------------------------------|--|-----------------------------------|
| <b>3 VOLT RATING AT 85°C — 2 VOLT AT 125°C</b>      |              |                           |                                  |  |                                   |
| 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                               |
| <b>6/6.3 VOLT RATING AT 85°C — 4 VOLT AT 125°C</b>  |              |                           |                                  |  |                                   |
| 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  |                                   |
| <b>47.0</b>   | <b>C</b>     | <b>T340C476(1)006AS</b>   | <b>3.0</b>                       | <b>6</b>   | <b>1.5</b>                        |
| 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                               |
| <b>10 VOLT RATING AT 85°C — 6 VOLT AT 125°C</b>     |              |                           |                                  |  |                                   |
| <b>4.7</b>  | <b>A</b>     | <b>T340A475(1)010AS</b>   | <b>1.0</b>                       | <b>6</b>   | <b>7.5</b>                        |
| 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  |                                   |
| <b>33.0</b>   | <b>C</b>     | <b>T340C336(1)010AS</b>   | <b>5.0</b>                       | <b>6</b>   | <b>1.7</b>                        |
| 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  |                                   |
| <b>100.0</b>  | <b>D/F</b>   | <b>T340(2)107(1)010AS</b> | <b>10.0</b>                      | <b>6</b>   | <b>1.0</b>                        |
| 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                               |
| <b>15/16 VOLT RATING AT 85°C — 10 VOLT AT 125°C</b> |              |                           |                                  |  |                                   |
| <b>3.3</b>  | <b>A</b>     | <b>T340A335(1)015AS</b>   | <b>1.0</b>                       | <b>6</b>   | <b>9.0</b>                        |
| 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  |                                   |
| <b>10.0</b>   | <b>B</b>     | <b>T340B106(1)015AS</b>   | <b>3.0</b>                       | <b>6</b>   | <b>3.2</b>                        |

(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<br>µF  | CASE<br>SIZE | KEMET<br>PART NUMBER      | MAX.<br>DC<br>LEAKAGE<br>µA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120 HZ | MAX<br>IMPEDANCE<br>Ω@<br>10 kHz |
|--|--------------|---------------------------|----------------------------------|--|----------------------------------|
| <b>15/16 VOLT RATING AT 85°C — 10 VOLT AT 125°C (Cont'd)</b> |              |                           |                                  |  |                                  |
| 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  |                                  |
| <b>22.0</b>  | <b>C</b>     | <b>T340C226(1)015AS</b>   | <b>4.0</b>                       | <b>6</b>   |                                  |
| 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                              |
| <b>47.0</b>  | <b>D/F</b>   | <b>T340(2)476(1)015AS</b> | <b>7.0</b>                       | <b>6</b>   |                                  |
| 56.0   | D/F          | T340(2)566(1)015AS        | 8.0                              | 6  |                                  |
| <b>68.0</b>  | <b>D/F</b>   | <b>T340(2)686(1)015AS</b> | <b>9.0</b>                       | <b>6</b>   |                                  |
| 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                              |
| <b>150.0</b>   | <b>E</b>     | <b>T340E157(1)015AS</b>   | <b>10.0</b>                      | <b>6</b>   |                                  |
| <b>20 VOLT RATING AT 85°C — 13 VOLT AT 125°C</b>             |              |                           |                                  |  |                                  |
| 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                              |
| <b>25 VOLT RATING AT 85°C — 16 VOLT AT 125°C</b>             |              |                           |                                  |  |                                  |
| <b>1.5</b>   | <b>A</b>     | <b>T340A155(1)025AS</b>   | <b>1.0</b>                       | <b>6</b>   | <b>17.0</b>                      |
| 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  |                                  |
| <b>10.0</b>  | <b>C</b>     | <b>T340C106(1)025AS</b>   | <b>3.5</b>                       | <b>6</b>   |                                  |
| 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  |                                  |
| <b>33.0</b>  | <b>D/F</b>   | <b>T340(2)336(1)025AS</b> | <b>8.0</b>                       | <b>6</b>   |                                  |
| 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                              |
| <b>35 VOLT RATING AT 85°C — 23 VOLT AT 125°C</b>             |              |                           |                                  |  |                                  |
| 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                             |
| <b>1.0</b>   | <b>A</b>     | <b>T340A105(1)035AS</b>   | <b>1.0</b>                       | <b>6</b>   | <b>25.0</b>                      |
| 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  |                                  |
| <b>2.2</b>   | <b>B</b>     | <b>T340B225(1)035AS</b>   | <b>1.0</b>                       | <b>6</b>   |                                  |
| 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<br>µF   | CASE<br>SIZE | KEMET<br>PART NUMBER      | MAX.<br>DC<br>LEAKAGE<br>µA@25°C | MAX.<br>DISSIPATION<br>FACTOR<br>%@25°C,<br>120 HZ | MAX<br>IMPEDANCE<br>Ω@<br>10 kHz |
|---|--------------|---------------------------|----------------------------------|--|----------------------------------|
| <b>35 VOLT RATING AT 85°C — 23 VOLT AT 125°C (Cont'd)</b> |              |                           |                                  |  |                                  |
| 3.9   | C            | T340C395(1)035AS          | 1.0                              | 6  | <b>5.5</b>                       |
| <b>4.7</b>  | <b>C</b>     | <b>T340C475(1)035AS</b>   | <b>2.5</b>                       | <b>6</b>   |                                  |
| 5.6   | C            | T340C565(1)035AS          | 2.5                              | 6  |                                  |
| <b>6.8</b>  | <b>C</b>     | <b>T340C685(1)035AS</b>   | <b>3.0</b>                       | <b>6</b>   |                                  |
| 8.2   | C            | T340C825(1)035AS          | 4.0                              | 6  |                                  |
| <b>10.0</b>   | <b>C</b>     | <b>T340(2)106(1)035AS</b> | <b>4.0</b>                       | <b>6</b>   | <b>2.8</b>                       |
| 12.0  | D/F          | T340(2)126(1)035AS        | 5.0                              | 6  | 2.2                              |
| 15.0  | D/F          | T340(2)156(1)035AS        | 5.0                              | 6  |                                  |
| 18.0  | D/F          | T340(2)186(1)035AS        | 8.0                              | 6  |                                  |
| <b>22.0</b>   | <b>D/F</b>   | <b>T340(2)226(1)035AS</b> | <b>8.0</b>                       | <b>6</b>   |                                  |
| 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                              |
| <b>47.0</b>   | <b>E</b>     | <b>T340E476(1)035AS</b>   | <b>10.0</b>                      | <b>6</b>   | <b>1.1</b>                       |
| <b>40 VOLT RATING AT 85°C — 32 VOLT AT 100°C</b>          |              |                           |                                  |  |                                  |
| 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                              |
| <b>50 VOLT RATING AT 85°C — 33 VOLT AT 125°C</b>          |              |                           |                                  |  |                                  |
| 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  | 50.0                             |
| 0.47  | B            | T340B474(1)050AS          | 1.0                              | 6  |                                  |
| 0.56  | B            | T340B564(1)050AS          | 1.0                              | 6  |                                  |
| 0.68  | B            | T340B684(1)050AS          | 1.0                              | 6  |                                  |
| 0.82  | B            | T340B824(1)050AS          | 1.0                              | 6  |                                  |
| 1.0   | B            | T340B105(1)050AS          | 1.0                              | 6  |                                  |
| 1.2   | B            | T340B125(1)050AS          | 1.0                              | 6  |                                  |
| 1.5   | B/C          | T340(2)155(1)050AS        | 1.1                              | 6  |                                  |
| 1.8   | B            | T340B185(1)050AS          | 1.1                              | 6  |                                  |
| 2.2   | B/C          | T340(2)225(1)050AS        | 1.5                              | 6  |                                  |
| 2.7   | C            | T340C275(1)050AS          | 1.5                              | 6  | 7.5                              |
| 3.3   | C/D          | T340(2)335(1)050AS        | 2.5                              | 6  |                                  |
| 3.9   | C            | T340C395(1)050AS          | 3.0                              | 6  |                                  |
| 4.7   | C/D          | T340(2)475(1)050AS        | 3.5                              | 6  |                                  |
| 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  |                                  |
| 12.0  | D/F          | T340(2)126(1)050AS        | 8.0                              | 6  |                                  |
| 15.0  | D/F          | T340(2)156(1)050AS        | 9.0                              | 6  |                                  |
| 18.0  | D/F          | T340(2)186(1)050AS        | 10.0                             | 6  |                                  |
| 22.0  | E            | T340E226(1)050AS          | 10.0                             | 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 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



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.

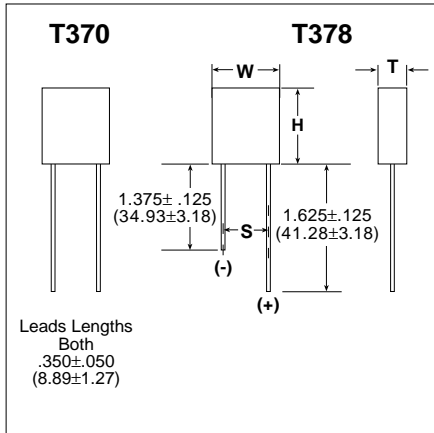
- **LEAD MATERIAL:** Solder coated nickel per MIL-STD1266, type N32.
- **LEAD TAPE and REEL:** Reeling per specification RS-468. See pages 72 and 74 for additional information.

**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)



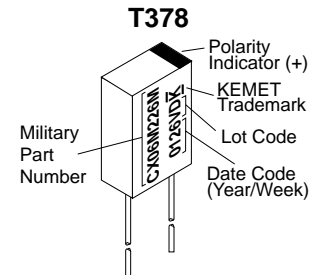
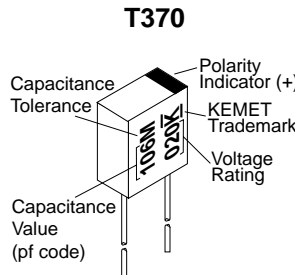
| CASE SIZE | H MAX.       | W MAX.      | T MAX.      | S LEAD SPACING           | LEAD DIAMETER ± .001 (.03) |
|-----------|--------------|-------------|-------------|--------------------------|----------------------------|
| *C        | .225 (5.72)  | .185 (4.70) | .075 (1.91) | .150 ± .010 (3.81 ± .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.

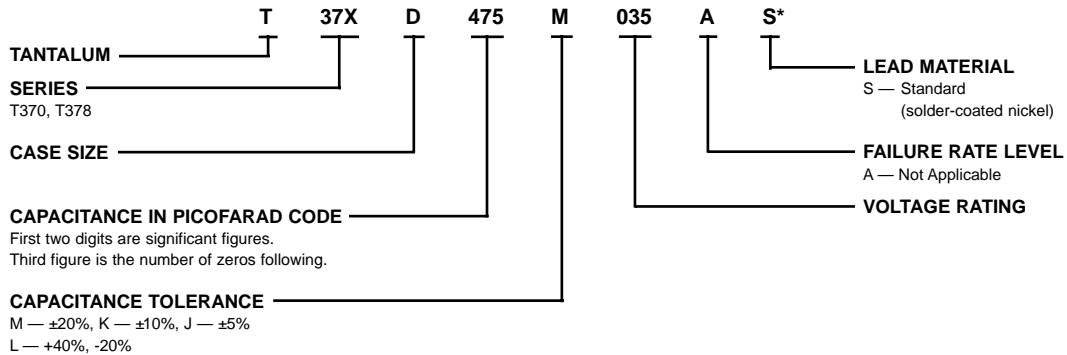
CAPACITOR MARKING

INDUSTRIAL PRODUCT

MILITARY PRODUCT

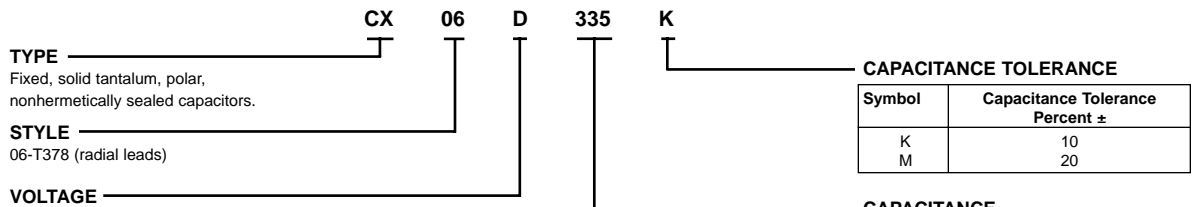


ORDERING INFORMATION  
KEMET PART NUMBER



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

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



| Symbol | Rated (85°C)<br>Volts, dc | Surge (85°C)<br>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<br>μF                                      | CASE<br>SIZE | INDUSTRIAL PRODUCT<br>T370<br>PART NO. | MILITARY PRODUCT |                  | DC LEAKAGE<br>μA@25°C<br>MAXIMUM | DISSIPATION FACTOR<br>%@25°C 120HZ<br>MAXIMUM |
|--|--------------|--|------------------|------------------|----------------------------------|---|
|  |              |  | CX06<br>PART NO. | T378<br>PART NO. |                                  |   |
| <b>3 VOLT RATING AT 85°C—2.0 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 220.0  | F            | T370F227(1)003AS                       | CX06B227(2)      | T378F227(3)003AS | 9.0                              | 15  |
| <b>4 VOLT RATING AT 85°C—2.7 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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   |
| <b>6 VOLT RATING AT 85°C—4.0 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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  |
| <b>10 VOLT RATING AT 85°C—7.0 VOLT RATING AT 125°C</b> |              |  |                  |                  |                                  |   |
| 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   |
| <b>15 VOLT RATING AT 85°C—10 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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   |
| <b>20 VOLT RATING AT 85°C—13 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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   |
| <b>25 VOLT RATING AT 85°C—17 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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   |
| <b>35 VOLT RATING AT 85°C—23 VOLT RATING AT 125°C</b>  |              |  |                  |                  |                                  |   |
| 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%.