

KEMET standard hermetic sealed T110 Series are desirable for use in high humidity environments. They are ruggedly built, designed for miniaturized circuitry, and are especially suited for coupling, bypass, filtering and R-C timing circuits. They exhibit excellent stability, extremely low DC leakage current, dissipation factor, and ESR/impedance over a wide temperature and frequency range.

Available in standard EIA capacitance values from .0047-330 μF in $\pm 20\%$, $\pm 10\%$, and $\pm 5\%$ tolerances and working voltages from 6-125 VDC.

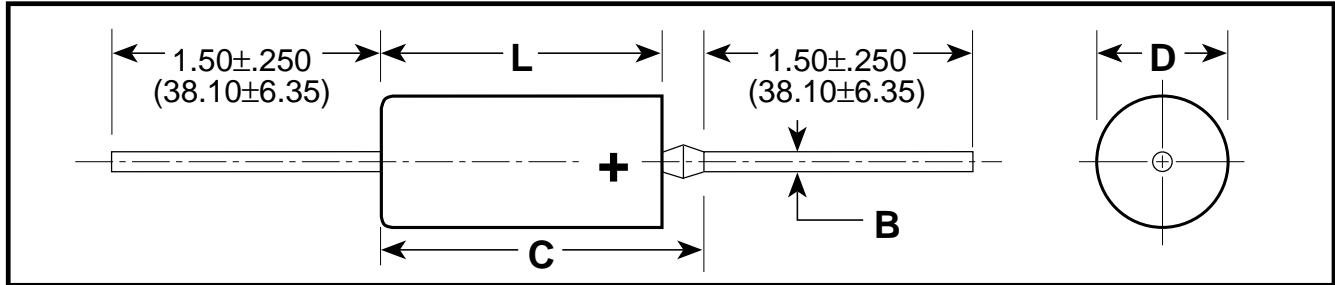
Higher CV values in comparable case sizes are available in KEMET T140 Series. Refer to page 27.

Included in the following Series table is a complete listing of CSR13 qualified MIL-PRF-39003 capacitors. KEMET is approved to manufacture the S (0.001%/k hrs.) Exponential & D (0.001%/k hrs.) Graded failure rate levels.

KEMET is now offering low ESR limits in the T110 Series. See ESR chart on page 19. You may order the lower ESR by using Customer Specification 2864 as the last four digits of the part number.

Effective September 30, 2005, the KEMET T110 Series is RoHS Compliant.

CAPACITOR OUTLINE DRAWINGS



DIMENSIONS — INCHES & (MILLIMETERS)

| CASE SIZE | UNINSULATED | | INSULATED | | B ± 0.002 $\pm (.05)$ | C MAX. |
|-----------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|------------------|
| | D ± 0.005 $\pm (.13)$ | L ± 0.031 $\pm (.79)$ | D ± 0.010 $\pm (.25)$ | L ± 0.031 $\pm (.79)$ | | |
| A | 0.125 (3.18) | 0.250 (6.35) | 0.135 (3.43) | 0.286 (7.26) | 0.020 (.51) | 0.422 (10.72) |
| B | 0.175 (4.45) | 0.438 (11.13) | 0.185 (4.70) | 0.474 (12.04) | 0.020 (.51) | 0.610 (15.49) |
| C | 0.279 (7.09) | 0.650 (16.51) | 0.289 (7.34) | 0.686 (17.42) | 0.025 (.64) | 0.822 (20.88) |
| D | 0.341 (8.66) | 0.750 (19.05) | 0.351 (8.92) | 0.786 (19.96) | 0.025 (.64) | 0.922 (23.42) |

ORDERING INFORMATION*

TANTALUM — T

SERIES — XXX
T110, T212 (CSR13)
T111, T213 (CSR91)
T140, T242 (CSR23)

CASE SIZE — A
A / B / C / D

PICOFARAD CODE — A 105
First two digits represent significant figures.
Third digit specifies number of zeros to follow.

CAPACITANCE TOLERANCE — K
M — $\pm 20\%$ K — $\pm 10\%$ J — $\pm 5\%$

VOLTAGE — 050
At 85°C

LEAD MATERIAL — S
S — Standard
T — 100% Tin (T110, T140 Series only)

FAILURE RATE**
GRADED
A — Not Applicable
B — 0.1%/k hrs.
C — 0.01%/k hrs.
D — 0.001%/k hrs.

EXponential
M — 1%/k hrs.
P — 0.1%/k hrs.
R — 0.01%/k hrs.
S — 0.001%/k hrs.

SPECIFICATION
All capacitors are sleeved unless specified.

****Failure Rates apply only to military products.**

****Part Number Example: T110A105K050AS (14 digits - no spaces)**
***For Military Ordering Information, see page 4.**

MARKING INFORMATION

Marking: Unless otherwise specified by special order, standard marking of T110 Series capacitor consists of the following:

A, B, C & D CASES

| | |
|-------------------|---|
| +K 10% | — Polarity, Manufacturer's Identification and Capacitance Tol. |
| R56 μF | — Nominal Capacitance — (μF) ("R" indicates decimal) |
| 100V | — Voltage |
| 0312 | — Date Code (e.g.: 0312) |

* For Military Marking, see page 4.



RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | |
|--|--------------|--------------------------------|------------------------|------------------------------------|---|---|-------------|-------------|--------------|----------------------------|-------------|--------------|-------------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 6 VOLT RATING AT 85°C — 4 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 2.2 | A | 5,10,20 | T110A225(1)006AS | 0.3 | 4 | | | | | | | | | |
| 2.7 | A | 5,10,20 | T110A275(1)006AS | 0.3 | 4 | | | | | | | | | |
| 3.3 | A | 5,10,20 | T110A335(1)006AS | 0.3 | 4 | | | | | | | | | |
| 3.9 | A | 5,10,20 | T110A395(1)006AS | 0.3 | 4 | | | | | | | | | |
| 4.7 | A | 5,10,20 | T110A475(1)006AS | 0.3 | 4 | | | | | | | | | |
| 5.6 | A | 5 | T110A565J006AS | 0.3 | 4 | 5001 | 5201 | 5401 | 5601 | 6001 | 7001 | 8001 | T212A565J006(2)S | |
| 5.6 | A | 10 | T110A565K006AS | 0.3 | 4 | 2241 | 2481 | 2721 | 2961 | 6002 | 7002 | 8002 | T212A565K006(2)S | |
| 5.6 | A | 20 | T110A565M006AS | 0.3 | 4 | | | | | | | | | |
| 6.8 | A | 5 | T110A685J006AS | 0.3 | 6 | 5002 | 5202 | 5402 | 5602 | 6003 | 7003 | 8003 | T212A685J006(2)S | |
| 6.8 | A | 10 | T110A685K006AS | 0.3 | 6 | 2242 | 2482 | 2722 | 2962 | 6004 | 7004 | 8004 | T212A685K006(2)S | |
| 6.8 | A | 20 | T110A685M006AS | 0.3 | 6 | 2243 | 2483 | 2723 | 2963 | 6005 | 7005 | 8005 | T212A685M006(2)S | |
| 8.2 | B | 5,10,20 | T110B825(1)006AS | 0.3 | 6 | | | | | | | | | |
| 10.0 | B | 5,10,20 | T110B106(1)006AS | 0.3 | 6 | | | | | | | | | |
| 12.0 | B | 5,10,20 | T110B126(1)006AS | 0.5 | 6 | | | | | | | | | |
| 15.0 | B | 5,10,20 | T110B156(1)006AS | 0.9 | 6 | | | | | | | | | |
| 18.0 | B | 5,10,20 | T110B186(1)006AS | 0.9 | 6 | | | | | | | | | |
| 22.0 | B | 5,10,20 | T110B226(1)006AS | 0.9 | 6 | | | | | | | | | |
| 27.0 | B | 5,10,20 | T110B276(1)006AS | 0.9 | 6 | | | | | | | | | |
| 33.0 | B | 5,10,20 | T110B336(1)006AS | 0.9 | 6 | | | | | | | | | |
| 39.0 | B | 5,10,20 | T110B396(1)006AS | 0.9 | 6 | | | | | | | | | |
| 47.0 | B | 5 | T110B476J006AS | 1.5 | 6 | 5003 | 5203 | 5403 | 5603 | 6006 | 7006 | 8006 | T212B476J006(2)S | |
| 47.0 | B | 10 | T110B476K006AS | 1.5 | 6 | 2244 | 2484 | 2724 | 2964 | 6007 | 7007 | 8007 | T212B476K006(2)S | |
| 47.0 | B | 20 | T110B476M006AS | 1.5 | 6 | 2245 | 2485 | 2725 | 2965 | 6008 | 7008 | 8008 | T212B476M006(2)S | |
| 56.0 | B | 5 | T110B566J006AS | 1.5 | 6 | 5004 | 5204 | 5404 | 5604 | 6009 | 7009 | 8009 | T212B566J006(2)S | |
| 56.0 | B | 10 | T110B566K006AS | 1.5 | 6 | 2246 | 2486 | 2726 | 2966 | 6010 | 7010 | 8010 | T212B566K006(2)S | |
| 56.0 | B | 20 | T110B566M006AS | 1.5 | 6 | | | | | | | | | |
| 68.0 | C | 5,10,20 | T110C686(1)006AS | 3.0 | 6 | | | | | | | | | |
| 82.0 | C | 5,10,20 | T110C826(1)006AS | 3.0 | 6 | | | | | | | | | |
| 100.0 | C | 5,10,20 | T110C107(1)006AS | 3.0 | 6 | | | | | | | | | |
| 120.0 | C | 5,10,20 | T110C127(1)006AS | 3.0 | 6 | | | | | | | | | |
| 150.0 | C | 5 | T110C157J006AS | 4.5 | 6 | 5005 | 5205 | 5405 | 5605 | 6011 | 7011 | 8011 | T212C157J006(2)S | |
| 150.0 | C | 10 | T110C157K006AS | 4.5 | 6 | 2247 | 2487 | 2727 | 2967 | 6012 | 7012 | 8012 | T212C157K006(2)S | |
| 150.0 | C | 20 | T110C157M006AS | 4.5 | 6 | 2248 | 2488 | 2728 | 2968 | 6013 | 7013 | 8013 | T212C157M006(2)S | |
| 180.0 | C | 5 | T110C187J006AS | 5.5 | 6 | 5006 | 5206 | 5406 | 5606 | 6014 | 7014 | 8014 | T212C187J006(2)S | |
| 180.0 | C | 10 | T110C187K006AS | 5.5 | 6 | 2249 | 2489 | 2729 | 2969 | 6015 | 7015 | 8015 | T212C187K006(2)S | |
| 180.0 | C | 20 | T110C187M006AS | 5.5 | 6 | | | | | | | | | |
| 220.0 | D | 5,10,20 | T110D227(1)006AS | 6.0 | 8 | | | | | | | | | |
| 270.0 | D | 5 | T110D277J006AS | 6.0 | 8 | 5007 | 5207 | 5407 | 5607 | 6016 | 7016 | 8016 | T212D277J006(2)S | |
| 270.0 | D | 10 | T110D277K006AS | 6.0 | 8 | 2250 | 2490 | 2730 | 2970 | 6017 | 7017 | 8017 | T212D277K006(2)S | |
| 270.0 | D | 20 | T110D277M006AS | 6.0 | 8 | | | | | | | | | |
| 330.0 | D | 5 | T110D337J006AS | 7.5 | 8 | 5008 | 5208 | 5408 | 5608 | 6018 | 7018 | 8018 | T212D337J006(2)S | |
| 330.0 | D | 10 | T110D337K006AS | 7.5 | 8 | 2251 | 2491 | 2731 | 2971 | 6019 | 7019 | 8019 | T212D337K006(2)S | |
| 330.0 | D | 20 | T110D337M006AS | 7.5 | 8 | 2252 | 2492 | 2732 | 2972 | 6020 | 7020 | 8020 | T212D337M006(2)S | |
| 10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 1.0 | A | 5,10,20 | T110A105(1)010AS | 0.3 | 3 | | | | | | | | | |
| 1.2 | A | 5,10,20 | T110A125(1)010AS | 0.3 | 4 | | | | | | | | | |
| 1.5 | A | 5,10,20 | T110A155(1)010AS | 0.3 | 4 | | | | | | | | | |
| 1.8 | A | 5,10,20 | T110A185(1)010AS | 0.3 | 4 | | | | | | | | | |
| 2.2 | A | 5,10,20 | T110A225(1)010AS | 0.3 | 4 | | | | | | | | | |
| 2.7 | A | 5,10,20 | T110A275(1)010AS | 0.3 | 4 | | | | | | | | | |
| 3.3 | A | 5,10,20 | T110A335(1)010AS | 0.3 | 4 | | | | | | | | | |
| 3.9 | A | 5 | T110A395J 010AS | 0.3 | 4 | 5009 | 5209 | 5409 | 5609 | 6021 | 7021 | 8021 | T212A395J010(2)S | |
| 3.9 | A | 10 | T110A395K 010AS | 0.3 | 4 | 2253 | 2493 | 2733 | 2973 | 6022 | 7022 | 8022 | T212A395K010(2)S | |
| 3.9 | A | 20 | T110A395M 010AS | 0.3 | 4 | | | | | | | | | |
| 4.7 | A | 5 | T110A475J 010AS | 0.4 | 4 | 5010 | 5210 | 5410 | 5610 | 6023 | 7023 | 8023 | T212A475J010(2)S | |
| 4.7 | A | 10 | T110A475K 010AS | 0.4 | 4 | 2254 | 2494 | 2734 | 2974 | 6024 | 7024 | 8024 | T212A475K010(2)S | |
| 4.7 | A | 20 | T110A475M010AS | 0.4 | 4 | 2255 | 2495 | 2735 | 2975 | 6025 | 7025 | 8025 | T212A475M010(2)S | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.
(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.

T110/T212 Series Tantalum
Hermetically Sealed

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE μF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|---|--------------|--------------------------------|-----------------------|------------------------------------|---|---|-------------|-------------|--------------|----------------------------|-------------|--------------|--|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE μA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 10 VOLT RATING AT 85°C — 7 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 5.6 | B | 5,10,20 | T110B565(1)010AS | 0.4 | 4 | | | | | | | | | |
| 6.8 | B | 5,10,20 | T110B685(1)010AS | 1.0 | 6 | | | | | | | | | |
| 8.2 | B | 5,10,20 | T110B825(1)010AS | 1.0 | 6 | | | | | | | | | |
| 10.0 | B | 5,10,20 | T110B106(1)010AS | 1.0 | 6 | | | | | | | | | |
| 12.0 | B | 5,10,20 | T110B126(1)010AS | 1.0 | 6 | | | | | | | | | |
| 15.0 | B | 5,10,20 | T110B156(1)010AS | 1.0 | 6 | | | | | | | | | |
| 18.0 | B | 5,10,20 | T110B186(1)010AS | 1.0 | 6 | | | | | | | | | |
| 22.0 | B | 5,10,20 | T110B226(1)010AS | 2.0 | 6 | | | | | | | | | |
| 27.0 | B | 5 | T110B276J010AS | 2.0 | 6 | 5011 | 5211 | 5411 | 5611 | 6026 | 7026 | 8026 | | T212B276J010(2)S |
| 27.0 | B | 10 | T110B276K010AS | 2.0 | 6 | 2256 | 2496 | 2736 | 2976 | 6027 | 7027 | 8027 | | T212B276K010(2)S |
| 27.0 | B | 20 | T110B276M010AS | 2.0 | 6 | | | | | | | | | |
| 33.0 | B | 5 | T110B336J010AS | 2.0 | 6 | 5012 | 5212 | 5412 | 5612 | 6028 | 7028 | 8028 | | T212B336J010(2)S |
| 33.0 | B | 10 | T110B336K010AS | 2.0 | 6 | 2257 | 2497 | 2737 | 2977 | 6029 | 7029 | 8029 | | T212B336K010(2)S |
| 33.0 | B | 20 | T110B336M010AS | 2.0 | 6 | 2258 | 2498 | 2738 | 2978 | 6030 | 7030 | 8030 | | T212B336M010(2)S |
| 39.0 | B | 5 | T110B396J010AS | 2.0 | 6 | 5013 | 5213 | 5413 | 5613 | 6031 | 7031 | 8031 | | T212B396J010(2)S |
| 39.0 | B | 10 | T110B396K010AS | 2.0 | 6 | 2259 | 2499 | 2739 | 2979 | 6032 | 7032 | 8032 | | T212B396K010(2)S |
| 39.0 | B | 20 | T110B396M010AS | 2.0 | 6 | | | | | | | | | |
| 47.0 | C | 5,10,20 | T110C476(1)010AS | 3.0 | 6 | | | | | | | | | |
| 56.0 | C | 5,10,20 | T110C566(1)010AS | 3.0 | 6 | | | | | | | | | |
| 68.0 | C | 5,10,20 | T110C686(1)010AS | 3.0 | 6 | | | | | | | | | |
| 82.0 | C | 5 | T110C826J010AS | 3.0 | 6 | 5014 | 5214 | 5414 | 5614 | 6033 | 7033 | 8033 | | T212C826J010(2)S |
| 82.0 | C | 10 | T110C826K010AS | 3.0 | 6 | 2260 | 2500 | 2740 | 2980 | 6034 | 7034 | 8034 | | T212C826K010(2)S |
| 82.0 | C | 20 | T110C826M010AS | 3.0 | 6 | | | | | | | | | |
| 100.0 | C | 5 | T110C107J010AS | 5.0 | 6 | 5015 | 5215 | 5415 | 5615 | 6035 | 7035 | 8035 | | T212C107J010(2)S |
| 100.0 | C | 10 | T110C107K010AS | 5.0 | 6 | 2261 | 2501 | 2741 | 2981 | 6036 | 7036 | 8036 | | T212C107K010(2)S |
| 100.0 | C | 20 | T110C107M010AS | 5.0 | 6 | 2262 | 2502 | 2742 | 2982 | 6037 | 7037 | 8037 | | T212C107M010(2)S |
| 120.0 | C | 5 | T110C127J010AS | 6.0 | 6 | 5016 | 5216 | 5416 | 5616 | 6038 | 7038 | 8038 | | T212C127J010(2)S |
| 120.0 | C | 10 | T110C127K010AS | 6.0 | 6 | 2263 | 2503 | 2743 | 2983 | 6039 | 7039 | 8039 | | T212C127K010(2)S |
| 120.0 | C | 20 | T110C127M010AS | 6.0 | 6 | | | | | | | | | |
| 150.0 | D | 5,10,20 | T110D157(1)010AS | 9.0 | 6 | | | | | | | | | |
| 180.0 | D | 5 | T110D187J010AS | 9.0 | 6 | 5017 | 5217 | 5417 | 5617 | 6040 | 7040 | 8040 | | T212D187J010(2)S |
| 180.0 | D | 10 | T110D187K010AS | 9.0 | 6 | 2264 | 2504 | 2744 | 2984 | 6041 | 7041 | 8041 | | T212D187K010(2)S |
| 180.0 | D | 20 | T110D187M010AS | 9.0 | 6 | | | | | | | | | |
| 220.0 | D | 5 | T110D227J010AS | 10.0 | 8 | 5018 | 5218 | 5418 | 5618 | 6042 | 7042 | 8042 | | T212D227J010(2)S |
| 220.0 | D | 10 | T110D227K010AS | 10.0 | 8 | 2265 | 2505 | 2745 | 2985 | 6043 | 7043 | 8043 | | T212D227K010(2)S |
| 220.0 | D | 20 | T110D227M010AS | 10.0 | 8 | 2266 | 2506 | 2746 | 2986 | 6044 | 7044 | 8044 | | T212D227M010(2)S |
| 15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 0.33 | A | 5,10,20 | T110A334(1)015AS | 0.3 | 3 | | | | | | | | | |
| 0.39 | A | 5,10,20 | T110A394(1)015AS | 0.3 | 3 | | | | | | | | | |
| 0.47 | A | 5,10,20 | T110A474(1)015AS | 0.3 | 3 | | | | | | | | | |
| 0.56 | A | 5,10,20 | T110A564(1)015AS | 0.3 | 3 | | | | | | | | | |
| 0.68 | A | 5,10,20 | T110A684(1)015AS | 0.3 | 3 | | | | | | | | | |
| 0.82 | A | 5,10,20 | T110A824(1)015AS | 0.3 | 3 | | | | | | | | | |
| 1.0 | A | 5,10,20 | T110A105(1)015AS | 0.3 | 3 | | | | | | | | | |
| 1.2 | A | 5,10,20 | T110A125(1)015AS | 0.3 | 4 | | | | | | | | | |
| 1.5 | A | 5,10,20 | T110A155(1)015AS | 0.3 | 4 | | | | | | | | | |
| 1.8 | A | 5,10,20 | T110A185(1)015AS | 0.3 | 4 | | | | | | | | | |
| 2.2 | A | 5,10,20 | T110A225(1)015AS | 0.3 | 4 | | | | | | | | | |
| 2.7 | A | 5 | T110A275J015AS | 0.3 | 4 | 5019 | 5219 | 5419 | 5619 | 6045 | 7045 | 8045 | | T212A275J015(2)S |
| 2.7 | A | 10 | T110A275K015AS | 0.3 | 4 | 2267 | 2507 | 2747 | 2987 | 6046 | 7046 | 8046 | | T212A275K015(2)S |
| 2.7 | A | 20 | T110A275M015AS | 0.3 | 4 | | | | | | | | | |
| 3.3 | A | 5 | T110A335J015AS | 0.4 | 4 | 5020 | 5220 | 5420 | 5620 | 6047 | 7047 | 8047 | | T212A335J015(2)S |
| 3.3 | A | 10 | T110A335K015AS | 0.4 | 4 | 2268 | 2508 | 2748 | 2988 | 6048 | 7048 | 8048 | | T212A335K015(2)S |
| 3.3 | A | 20 | T110A335M015AS | 0.4 | 4 | 2269 | 2509 | 2749 | 2989 | 6049 | 7049 | 8049 | | T212A335M015(2)S |
| 3.9 | B | 5,10,20 | T110B395(1)015AS | 0.4 | 4 | | | | | | | | | |
| 4.7 | B | 5,10,20 | T110B475(1)015AS | 0.7 | 4 | | | | | | | | | |
| 5.6 | B | 5,10,20 | T110B565(1)015AS | 0.7 | 4 | | | | | | | | | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.
 (2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.



RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|-----------------------|------------------------------------|---|---|-------------|-------------|--------------|----------------------------|-------------|--------------|-------------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 15 VOLT RATING AT 85°C — 10 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 6.8 | B | 5,10,20 | T110B685(1)015AS | 0.7 | 6 | | | | | | | | | |
| 8.2 | B | 5,10,20 | T110B825(1)015AS | 0.7 | 6 | | | | | | | | | |
| 10.0 | B | 5,10,20 | T110B106(1)015AS | 1.0 | 6 | | | | | | | | | |
| 12.0 | B | 5,10,20 | T110B126(1)015AS | 1.0 | 6 | | | | | | | | | |
| 15.0 | B | 5,10,20 | T110B156(1)015AS | 2.0 | 6 | | | | | | | | | |
| 18.0 | B | 5 | T110B186J015AS | 2.0 | 6 | 5021 | 5221 | 5421 | 5621 | 6050 | 7050 | 8050 | T212B186J015(2)S | |
| 18.0 | B | 10 | T110B186K015AS | 2.0 | 6 | 2270 | 2510 | 2750 | 2990 | 6051 | 7051 | 8051 | T212B186K015(2)S | |
| 18.0 | B | 20 | T110B186M015AS | 2.0 | 6 | | | | | | | | | |
| 22.0 | B | 5 | T110B226J015AS | 2.0 | 6 | 5022 | 5222 | 5422 | 5622 | 6052 | 7052 | 8052 | T212B226J015(2)S | |
| 22.0 | B | 10 | T110B226K015AS | 2.0 | 6 | 2271 | 2511 | 2751 | 2991 | 6053 | 7053 | 8053 | T212B226K015(2)S | |
| 22.0 | B | 20 | T110B226M015AS | 2.0 | 6 | 2272 | 2512 | 2752 | 2992 | 6054 | 7054 | 8054 | T212B226M015(2)S | |
| 27.0 | C | 5,10,20 | T110C276(1)015AS | 3.0 | 6 | | | | | | | | | |
| 33.0 | C | 5,10,20 | T110C336(1)015AS | 3.0 | 6 | | | | | | | | | |
| 39.0 | C | 5,10,20 | T110C396(1)015AS | 3.0 | 6 | | | | | | | | | |
| 47.0 | C | 5,10,20 | T110C476(1)015AS | 4.0 | 6 | | | | | | | | | |
| 56.0 | C | 5 | T110C566J015AS | 4.0 | 6 | 5023 | 5223 | 5423 | 5623 | 6055 | 7055 | 8055 | T212C566J015(2)S | |
| 56.0 | C | 10 | T110C566K015AS | 4.0 | 6 | 2273 | 2513 | 2753 | 2993 | 6056 | 7056 | 8056 | T212C566K015(2)S | |
| 56.0 | C | 20 | T110C566M015AS | 4.0 | 6 | | | | | | | | | |
| 68.0 | C | 5 | T110C686J015AS | 5.0 | 6 | 5024 | 5224 | 5424 | 5624 | 6057 | 7057 | 8057 | T212C686J015(2)S | |
| 68.0 | C | 10 | T110C686K015AS | 5.0 | 6 | 2274 | 2514 | 2754 | 2994 | 6058 | 7058 | 8058 | T212C686K015(2)S | |
| 68.0 | C | 20 | T110C686M015AS | 5.0 | 6 | 2275 | 2515 | 2755 | 2995 | 6059 | 7059 | 8059 | T212C686M015(2)S | |
| 82.0 | D | 5,10,20 | T110D826(1)015AS | 6.0 | 6 | | | | | | | | | |
| 100.0 | D | 5,10,20 | T110D107(1)015AS | 6.0 | 6 | | | | | | | | | |
| 120.0 | D | 5 | T110D127J015AS | 6.0 | 6 | 5025 | 5225 | 5425 | 5625 | 6060 | 7060 | 8060 | T212D127J015(2)S | |
| 120.0 | D | 10 | T110D127K015AS | 6.0 | 6 | 2276 | 2516 | 2756 | 2996 | 6061 | 7061 | 8061 | T212D127K015(2)S | |
| 120.0 | D | 20 | T110D127M015AS | 6.0 | 6 | | | | | | | | | |
| 150.0 | D | 5 | T110D157J015AS | 8.0 | 6 | 5026 | 5226 | 5426 | 5626 | 6062 | 7062 | 8062 | T212D157J015(2)S | |
| 150.0 | D | 10 | T110D157K015AS | 8.0 | 6 | 2277 | 2517 | 2757 | 2997 | 6063 | 7063 | 8063 | T212D157K015(2)S | |
| 150.0 | D | 20 | T110D157M015AS | 8.0 | 6 | 2278 | 2518 | 2758 | 2998 | 6064 | 7064 | 8064 | T212D157M015(2)S | |
| 20 VOLT RATING AT 85°C — 13 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 0.047 | A | 5,10,20 | T110A473(1)020AS | 0.1 | 3 | | | | | | | | | |
| 0.056 | A | 5,10,20 | T110A563(1)020AS | 0.1 | 3 | | | | | | | | | |
| 0.068 | A | 5,10,20 | T110A683(1)020AS | 0.1 | 3 | | | | | | | | | |
| 0.082 | A | 5,10,20 | T110A823(1)020AS | 0.1 | 3 | | | | | | | | | |
| 0.1 | A | 5,10,20 | T110A104(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.12 | A | 5,10,20 | T110A124(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.15 | A | 5,10,20 | T110A154(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.18 | A | 5,10,20 | T110A184(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.22 | A | 5,10,20 | T110A224(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.27 | A | 5,10,20 | T110A274(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.33 | A | 5,10,20 | T110A334(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.39 | A | 5,10,20 | T110A394(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.47 | A | 5,10,20 | T110A474(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.56 | A | 5,10,20 | T110A564(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.68 | A | 5,10,20 | T110A684(1)020AS | 0.3 | 3 | | | | | | | | | |
| 0.82 | A | 5,10,20 | T110A824(1)020AS | 0.3 | 3 | | | | | | | | | |
| 1.0 | A | 5,10,20 | T110A105(1)020AS | 0.3 | 3 | | | | | | | | | |
| 1.2 | A | 5 | T110A125J020AS | 0.3 | 4 | 5027 | 5227 | 5427 | 5627 | 6065 | 7065 | 8065 | T212A125J020(2)S | |
| 1.2 | A | 10 | T110A125K020AS | 0.3 | 4 | 2279 | 2519 | 2759 | 2999 | 6066 | 7066 | 8066 | T212A125K020(2)S | |
| 1.2 | A | 20 | T110A125M020AS | 0.3 | 4 | | | | | | | | | |
| 1.5 | A | 5 | T110A155J020AS | 0.3 | 4 | 5028 | 5228 | 5428 | 5628 | 6067 | 7067 | 8067 | T212A155J020(2)S | |
| 1.5 | A | 10 | T110A155K020AS | 0.3 | 4 | 2280 | 2520 | 2760 | 3000 | 6068 | 7068 | 8068 | T212A155K020(2)S | |
| 1.5 | A | 20 | T110A155M020AS | 0.3 | 4 | 2281 | 2521 | 2761 | 3001 | 6069 | 7069 | 8069 | T212A155M020(2)S | |
| 1.8 | A | 5 | T110A185J020AS | 0.3 | 4 | 5029 | 5229 | 5429 | 5629 | 6070 | 7070 | 8070 | T212A185J020(2)S | |
| 1.8 | A | 10 | T110A185K020AS | 0.3 | 4 | 2282 | 2522 | 2762 | 3002 | 6071 | 7071 | 8071 | T212A185K020(2)S | |
| 1.8 | A | 20 | T110A185M020AS | 0.3 | 4 | | | | | | | | | |
| 2.2 | A | 5 | T110A225J020AS | 0.4 | 4 | 5010 | 5230 | 5430 | 5630 | 6072 | 7072 | 8072 | T212A225J020(2)S | |
| 2.2 | A | 10 | T110A225K020AS | 0.4 | 4 | 2283 | 2523 | 2763 | 3003 | 6073 | 7073 | 8073 | T212A225K020(2)S | |
| 2.2 | A | 20 | T110A225M020AS | 0.4 | 4 | 2284 | 2524 | 2764 | 3004 | 6074 | 7074 | 8074 | T212A225M020(2)S | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.
(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.
Bold Face lines indicate popular part types and values.

T110/T212 Series Tantalum
Hermetically Sealed



TANTALUM HERMETICALLY SEALED / AXIAL — MIL-PRF-39003

T110 SERIES — POLAR TYPE & T212 (CSR13)

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 50 VOLT RATING AT 85°C — 33 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 0.0082 | A | 5 | T110A822J050AS | 0.1 | 2 | 5053 | 5253 | 5453 | 5653 | 6131 | 7131 | 8131 | T212A822J050(2)S | |
| 0.0082 | A | 10 | T110A822K050AS | 0.1 | 2 | 2319 | 2559 | 2799 | 3039 | 6132 | 7132 | 8132 | T212A822K050(2)S | |
| 0.0082 | A | 20 | T110A822M050AS | 0.1 | 2 | | | | | | | | | |
| 0.01 | A | 5 | T110A103J050AS | 0.1 | 2 | 5054 | 5254 | 5454 | 5654 | 6133 | 7133 | 8133 | T212A103J050(2)S | |
| 0.01 | A | 10 | T110A103K050AS | 0.1 | 2 | 2320 | 2560 | 2800 | 3040 | 6134 | 7134 | 8134 | T212A103K050(2)S | |
| 0.01 | A | 20 | T110A103M050AS | 0.1 | 2 | 2321 | 2561 | 2801 | 3041 | 6135 | 7135 | 8135 | T212A103M050(2)S | |
| 0.012 | A | 5 | T110A123J050AS | 0.1 | 2 | 5055 | 5255 | 5455 | 5655 | 6136 | 7136 | 8136 | T212A123J050(2)S | |
| 0.012 | A | 10 | T110A123K050AS | 0.1 | 2 | 2322 | 2562 | 2802 | 3042 | 6137 | 7137 | 8137 | T212A123K050(2)S | |
| 0.012 | A | 20 | T110A123M050AS | 0.1 | 2 | | | | | | | | | |
| 0.015 | A | 5 | T110A153J050AS | 0.1 | 2 | 5056 | 5256 | 5456 | 5656 | 6138 | 7138 | 8138 | T212A153J050(2)S | |
| 0.015 | A | 10 | T110A153K050AS | 0.1 | 2 | 2323 | 2563 | 2803 | 3043 | 6139 | 7139 | 8139 | T212A153K050(2)S | |
| 0.015 | A | 20 | T110A153M050AS | 0.1 | 2 | 2324 | 2564 | 2804 | 3044 | 6140 | 7140 | 8140 | T212A153M050(2)S | |
| 0.018 | A | 5 | T110A183J050AS | 0.1 | 2 | 5057 | 5257 | 5457 | 5657 | 6141 | 7141 | 8141 | T212A183J050(2)S | |
| 0.018 | A | 10 | T110A183K050AS | 0.1 | 2 | 2325 | 2565 | 2805 | 3045 | 6142 | 7142 | 8142 | T212A183K050(2)S | |
| 0.018 | A | 20 | T110A183M050AS | 0.1 | 2 | | | | | | | | | |
| 0.022 | A | 5 | T110A223J050AS | 0.1 | 2 | 5058 | 5258 | 5458 | 5658 | 6143 | 7143 | 8143 | T212A223J050(2)S | |
| 0.022 | A | 10 | T110A223K050AS | 0.1 | 2 | 2326 | 2566 | 2806 | 3046 | 6144 | 7144 | 8144 | T212A223K050(2)S | |
| 0.022 | A | 20 | T110A223M050AS | 0.1 | 2 | 2327 | 2567 | 2807 | 3047 | 6145 | 7145 | 8145 | T212A223M050(2)S | |
| 0.027 | A | 5 | T110A273J050AS | 0.1 | 2 | 5059 | 5259 | 5459 | 5659 | 6146 | 7146 | 8146 | T212A273J050(2)S | |
| 0.027 | A | 10 | T110A273K050AS | 0.1 | 2 | 2328 | 2568 | 2808 | 3048 | 6147 | 7147 | 8147 | T212A273K050(2)S | |
| 0.027 | A | 20 | T110A273M050AS | 0.1 | 2 | | | | | | | | | |
| 0.033 | A | 5 | T110A333J050AS | 0.1 | 2 | 5060 | 5260 | 5460 | 5660 | 6148 | 7148 | 8148 | T212A333J050(2)S | |
| 0.033 | A | 10 | T110A333K050AS | 0.1 | 2 | 2329 | 2569 | 2809 | 3049 | 6149 | 7149 | 8149 | T212A333K050(2)S | |
| 0.033 | A | 20 | T110A333M050AS | 0.1 | 2 | 2330 | 2570 | 2810 | 3050 | 6150 | 7150 | 8150 | T212A333M050(2)S | |
| 0.039 | A | 5 | T110A393J050AS | 0.1 | 2 | 5061 | 5261 | 5461 | 5661 | 6151 | 7151 | 8151 | T212A393J050(2)S | |
| 0.039 | A | 10 | T110A393K050AS | 0.1 | 2 | 2331 | 2571 | 2811 | 3051 | 6152 | 7152 | 8152 | T212A393K050(2)S | |
| 0.039 | A | 20 | T110A393M050AS | 0.1 | 2 | | | | | | | | | |
| 0.047 | A | 5 | T110A473J050AS | 0.1 | 2 | 5062 | 5262 | 5462 | 5662 | 6153 | 7153 | 8153 | T212A473J050(2)S | |
| 0.047 | A | 10 | T110A473K050AS | 0.1 | 2 | 2332 | 2572 | 2812 | 3052 | 6154 | 7154 | 8154 | T212A473K050(2)S | |
| 0.047 | A | 20 | T110A473M050AS | 0.1 | 2 | 2333 | 2573 | 2813 | 3053 | 6155 | 7155 | 8155 | T212A473M050(2)S | |
| 0.056 | A | 5 | T110A563J050AS | 0.1 | 2 | 5063 | 5263 | 5463 | 5663 | 6156 | 7156 | 8156 | T212A563J050(2)S | |
| 0.056 | A | 10 | T110A563K050AS | 0.1 | 2 | 2334 | 2574 | 2814 | 3054 | 6157 | 7157 | 8157 | T212A563K050(2)S | |
| 0.056 | A | 20 | T110A563M050AS | 0.1 | 2 | | | | | | | | | |
| 0.068 | A | 5 | T110A683J050AS | 0.1 | 2 | 5064 | 5264 | 5464 | 5664 | 6158 | 7158 | 8158 | T212A683J050(2)S | |
| 0.068 | A | 10 | T110A683K050AS | 0.1 | 2 | 2335 | 2575 | 2815 | 3055 | 6159 | 7159 | 8159 | T212A683K050(2)S | |
| 0.068 | A | 20 | T110A683M050AS | 0.1 | 2 | 2336 | 2576 | 2816 | 3056 | 6160 | 7160 | 8160 | T212A683M050(2)S | |
| 0.082 | A | 5 | T110A823J050AS | 0.1 | 2 | 5065 | 5265 | 5465 | 5665 | 6161 | 7161 | 8161 | T212A823J050(2)S | |
| 0.082 | A | 10 | T110A823K050AS | 0.1 | 2 | 2337 | 2577 | 2817 | 3057 | 6162 | 7162 | 8162 | T212A823K050(2)S | |
| 0.082 | A | 20 | T110A823M050AS | 0.1 | 2 | | | | | | | | | |
| 0.1 | A | 5 | T110A104J050AS | 0.3 | 2 | 5066 | 5266 | 5466 | 5666 | 6163 | 7163 | 8163 | T212A104J050(2)S | |
| 0.1 | A | 10 | T110A104K050AS | 0.3 | 2 | 2338 | 2578 | 2818 | 3058 | 6164 | 7164 | 8164 | T212A104K050(2)S | |
| 0.1 | A | 20 | T110A104M050AS | 0.3 | 2 | 2339 | 2579 | 2819 | 3059 | 6165 | 7165 | 8165 | T212A104M050(2)S | |
| 0.12 | A | 5 | T110A124J050AS | 0.3 | 2 | 5067 | 5267 | 5467 | 5667 | 6166 | 7166 | 8166 | T212A124J050(2)S | |
| 0.12 | A | 10 | T110A124K050AS | 0.3 | 2 | 2340 | 2580 | 2820 | 3060 | 6167 | 7167 | 8167 | T212A124K050(2)S | |
| 0.12 | A | 20 | T110A124M050AS | 0.3 | 2 | | | | | | | | | |
| 0.15 | A | 5 | T110A154J050AS | 0.3 | 2 | 5068 | 5268 | 5468 | 5668 | 6168 | 7168 | 8168 | T212A154J050(2)S | |
| 0.15 | A | 10 | T110A154K050AS | 0.3 | 2 | 2341 | 2581 | 2821 | 3061 | 6169 | 7169 | 8169 | T212A154K050(2)S | |
| 0.15 | A | 20 | T110A154M050AS | 0.3 | 2 | 2342 | 2582 | 2822 | 3062 | 6170 | 7170 | 8170 | T212A154M050(2)S | |
| 0.18 | A | 5 | T110A184J050AS | 0.3 | 2 | 5069 | 5269 | 5469 | 5669 | 6171 | 7171 | 8171 | T212A184J050(2)S | |
| 0.18 | A | 10 | T110A184K050AS | 0.3 | 2 | 2343 | 2583 | 2823 | 3063 | 6172 | 7172 | 8172 | T212A184K050(2)S | |
| 0.18 | A | 20 | T110A184M050AS | 0.3 | 2 | | | | | | | | | |
| 0.22 | A | 5 | T110A224J050AS | 0.3 | 2 | 5070 | 5270 | 5470 | 5670 | 6173 | 7173 | 8173 | T212A224J050(2)S | |
| 0.22 | A | 10 | T110A224K050AS | 0.3 | 2 | 2344 | 2584 | 2824 | 3064 | 6174 | 7174 | 8174 | T212A224K050(2)S | |
| 0.22 | A | 20 | T110A224M050AS | 0.3 | 2 | 2345 | 2585 | 2825 | 3065 | 6175 | 7175 | 8175 | T212A224M050(2)S | |
| 0.27 | A | 5 | T110A274J050AS | 0.3 | 2 | 5071 | 5271 | 5471 | 5671 | 6176 | 7176 | 8176 | T212A274J050(2)S | |
| 0.27 | A | 10 | T110A274K050AS | 0.3 | 2 | 2346 | 2586 | 2826 | 3066 | 6177 | 7177 | 8177 | T212A274K050(2)S | |
| 0.27 | A | 20 | T110A274M050AS | 0.3 | 2 | | | | | | | | | |
| 0.33 | A | 5 | T110A334J050AS | 0.3 | 2 | 5072 | 5272 | 5472 | 5672 | 6178 | 7178 | 8178 | T212A334J050(2)S | |
| 0.33 | A | 10 | T110A334K050AS | 0.3 | 2 | 2347 | 2587 | 2827 | 3067 | 6179 | 7179 | 8179 | T212A334K050(2)S | |
| 0.33 | A | 20 | T110A334M050AS | 0.3 | 2 | 2348 | 2588 | 2828 | 3068 | 6180 | 7180 | 8180 | T212A334M050(2)S | |
| 0.39 | A | 5 | T110A394J050AS | 0.3 | 2 | 5073 | 5273 | 5473 | 5673 | 6181 | 7181 | 8181 | T212A394J050(2)S | |

(1) To complete T110 Series part number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.

(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.



TANTALUM HERMETICALLY SEALED / AXIAL — MIL-PRF-39003
T110 SERIES — POLAR TYPE & T212 (CSR13)

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE μF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|-----------------------|------------------------------------|---|---|-------------|-------------|--------------|----------------------------|-------------|--------------|-------------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE μA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 50 VOLT RATING AT 85°C — 33 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 18.0 | C | 10 | T110C186K050AS | 4.5 | 4 | 2379 | 2619 | 2859 | 3099 | 6232 | 7232 | 8232 | T212C186K050(2)S | |
| 18.0 | C | 20 | T110C186M050AS | 4.5 | 4 | | | | | | | | | |
| 22.0 | D | 5 | T110D226J050AS | 5.5 | 4 | 5094 | 5294 | 5494 | 5694 | 6233 | 7233 | 8233 | T212D226J050(2)S | |
| 22.0 | D | 10 | T110D226K050AS | 5.5 | 4 | 2380 | 2620 | 2860 | 3100 | 6234 | 7234 | 8234 | T212D226K050(2)S | |
| 22.0 | D | 20 | T110D226M050AS | 5.5 | 4 | 2381 | 2621 | 2861 | 3101 | 6235 | 7235 | 8235 | T212D226M050(2)S | |
| 60 VOLT RATING AT 85°C — 40 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 0.0047 | A | 5,10,20 | T110A472(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.0056 | A | 5,10,20 | T110A562(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.0068 | A | 5,10,20 | T110A682(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.0082 | A | 5,10,20 | T110A822(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.01 | A | 5,10,20 | T110A103(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.012 | A | 5,10,20 | T110A123(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.015 | A | 5,10,20 | T110A153(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.018 | A | 5,10,20 | T110A183(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.022 | A | 5,10,20 | T110A223(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.027 | A | 5,10,20 | T110A273(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.033 | A | 5,10,20 | T110A333(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.039 | A | 5,10,20 | T110A393(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.047 | A | 5,10,20 | T110A473(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.056 | A | 5,10,20 | T110A563(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.068 | A | 5,10,20 | T110A683(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.082 | A | 5,10,20 | T110A823(1)060AS | 0.3 | 3 | | | | | | | | | |
| 0.1 | A | 5,10,20 | T110A104(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.12 | A | 5,10,20 | T110A124(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.15 | A | 5,10,20 | T110A154(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.18 | A | 5,10,20 | T110A184(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.22 | A | 5,10,20 | T110A224(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.27 | A | 5,10,20 | T110A274(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.33 | A | 5,10,20 | T110A334(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.39 | A | 5,10,20 | T110A394(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.47 | A | 5,10,20 | T110A474(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.56 | A | 5,10,20 | T110A564(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.68 | A | 5,10,20 | T110A684(1)060AS | 0.5 | 3 | | | | | | | | | |
| 0.82 | B | 5,10,20 | T110B824(1)060AS | 0.5 | 3 | | | | | | | | | |
| 1.0 | B | 5,10,20 | T110B105(1)060AS | 0.5 | 3 | | | | | | | | | |
| 1.2 | B | 5,10,20 | T110B125(1)060AS | 0.5 | 4 | | | | | | | | | |
| 1.5 | B | 5,10,20 | T110B155(1)060AS | 0.5 | 4 | | | | | | | | | |
| 1.8 | B | 5,10,20 | T110B185(1)060AS | 0.5 | 4 | | | | | | | | | |
| 2.2 | B | 5,10,20 | T110B225(1)060AS | 1.0 | 4 | | | | | | | | | |
| 2.7 | B | 5,10,20 | T110B275(1)060AS | 1.0 | 4 | | | | | | | | | |
| 3.3 | B | 5,10,20 | T110B335(1)060AS | 1.5 | 4 | | | | | | | | | |
| 3.9 | B | 5,10,20 | T110B395(1)060AS | 1.5 | 4 | | | | | | | | | |
| 4.7 | C | 5,10,20 | T110C475(1)060AS | 2.0 | 4 | | | | | | | | | |
| 5.6 | C | 5,10,20 | T110C565(1)060AS | 2.0 | 4 | | | | | | | | | |
| 6.8 | C | 5,10,20 | T110C685(1)060AS | 3.0 | 4 | | | | | | | | | |
| 8.2 | C | 5,10,20 | T110C825(1)060AS | 4.0 | 4 | | | | | | | | | |
| 10.0 | C | 5,10,20 | T110C106(1)060AS | 5.0 | 4 | | | | | | | | | |
| 12.0 | C | 5,10,20 | T110C126(1)060AS | 5.0 | 4 | | | | | | | | | |
| 15.0 | D | 5,10,20 | T110D156(1)060AS | 4.0 | 4 | | | | | | | | | |
| 18.0 | D | 5,10,20 | T110D186(1)060AS | 5.0 | 4 | | | | | | | | | |
| 22.0 | D | 5,10,20 | T110D226(1)060AS | 6.0 | 4 | | | | | | | | | |
| 75 VOLT RATING AT 85°C — 50 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 0.0047 | A | 5,10,20 | T110A472(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.0056 | A | 5,10,20 | T110A562(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.0068 | A | 5,10,20 | T110A682(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.0082 | A | 5,10,20 | T110A822(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.01 | A | 5,10,20 | T110A103(1)075AS | 0.3 | 2 | | | | | | | | | |

(1) To complete T110 Series part number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.

(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.

RATINGS & PART NUMBER REFERENCE

T110/T212 Series Tantalum
Hermetically Sealed

| CAPACITANCE μF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE μA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 75 VOLT RATING AT 85°C — 50 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 0.012 | A | 5,10,20 | T110A123(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.015 | A | 5,10,20 | T110A153(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.018 | A | 5,10,20 | T110A183(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.022 | A | 5,10,20 | T110A223(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.027 | A | 5,10,20 | T110A273(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.033 | A | 5,10,20 | T110A333(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.039 | A | 5,10,20 | T110A393(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.047 | A | 5,10,20 | T110A473(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.056 | A | 5,10,20 | T110A563(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.068 | A | 5,10,20 | T110A683(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.082 | A | 5,10,20 | T110A823(1)075AS | 0.3 | 2 | | | | | | | | | |
| 0.1 | A | 5 | T110A104J075AS | 0.3 | 2 | 5095 | 5295 | 5495 | 5695 | 6236 | 7236 | 8236 | T212A104J075(2)S | |
| 0.1 | A | 10 | T110A104K075AS | 0.3 | 2 | 2382 | 2622 | 2862 | 3102 | 6237 | 7237 | 8237 | T212A104K075(2)S | |
| 0.1 | A | 20 | T110A104M075AS | 0.3 | 2 | 2383 | 2623 | 2863 | 3103 | 6238 | 7238 | 8238 | T212A104M075(2)S | |
| 0.12 | A | 5 | T110A124J075AS | 0.3 | 2 | 5096 | 5296 | 5496 | 5696 | 6239 | 7239 | 8239 | T212A124J075(2)S | |
| 0.12 | A | 10 | T110A124K075AS | 0.3 | 2 | 2384 | 2624 | 2864 | 3104 | 6240 | 7240 | 8240 | T212A124K075(2)S | |
| 0.12 | A | 20 | T110A124M075AS | 0.3 | 2 | | | | | | | | | |
| 0.15 | A | 5 | T110A154J075AS | 0.3 | 2 | 5097 | 5297 | 5497 | 5697 | 6241 | 7241 | 8241 | T212A154J075(2)S | |
| 0.15 | A | 10 | T110A154K075AS | 0.3 | 2 | 2385 | 2625 | 2865 | 3105 | 6242 | 7242 | 8242 | T212A154K075(2)S | |
| 0.15 | A | 20 | T110A154M075AS | 0.3 | 2 | 2386 | 2626 | 2866 | 3106 | 6243 | 7243 | 8243 | T212A154M075(2)S | |
| 0.18 | A | 5 | T110A184J075AS | 0.3 | 2 | 5098 | 5298 | 5498 | 5698 | 6244 | 7244 | 8244 | T212A184J075(2)S | |
| 0.18 | A | 10 | T110A184K075AS | 0.3 | 2 | 2387 | 2627 | 2867 | 3107 | 6245 | 7245 | 8245 | T212A184K075(2)S | |
| 0.18 | A | 20 | T110A184M075AS | 0.3 | 2 | | | | | | | | | |
| 0.22 | A | 5 | T110A224J075AS | 0.3 | 2 | 5099 | 5299 | 5499 | 5699 | 6246 | 7246 | 8246 | T212A224J075(2)S | |
| 0.22 | A | 10 | T110A224K075AS | 0.3 | 2 | 2388 | 2628 | 2868 | 3108 | 6247 | 7247 | 8247 | T212A224K075(2)S | |
| 0.22 | A | 20 | T110A224M075AS | 0.3 | 2 | 2389 | 2629 | 2869 | 3109 | 6248 | 7248 | 8248 | T212A224M075(2)S | |
| 0.27 | A | 5 | T110A274J075AS | 0.3 | 2 | 5100 | 5300 | 5500 | 5700 | 6249 | 7249 | 8249 | T212A274J075(2)S | |
| 0.27 | A | 10 | T110A274K075AS | 0.3 | 2 | 2390 | 2630 | 2870 | 3110 | 6250 | 7250 | 8250 | T212A274K075(2)S | |
| 0.27 | A | 20 | T110A274M075AS | 0.3 | 2 | | | | | | | | | |
| 0.33 | A | 5 | T110A334J075AS | 0.3 | 2 | 5101 | 5301 | 5501 | 5701 | 6251 | 7251 | 8251 | T212A334J075(2)S | |
| 0.33 | A | 10 | T110A334K075AS | 0.3 | 2 | 2391 | 2631 | 2871 | 3111 | 6252 | 7252 | 8252 | T212A334K075(2)S | |
| 0.33 | A | 20 | T110A334M075AS | 0.3 | 2 | 2392 | 2632 | 2872 | 3112 | 6253 | 7253 | 8253 | T212A334M075(2)S | |
| 0.39 | A | 5 | T110A394J075AS | 0.3 | 2 | 5102 | 5302 | 5502 | 5702 | 6254 | 7254 | 8254 | T212A394J075(2)S | |
| 0.39 | A | 10 | T110A394K075AS | 0.3 | 2 | 2393 | 2633 | 2873 | 3113 | 6255 | 7255 | 8255 | T212A394K075(2)S | |
| 0.39 | A | 20 | T110A394M075AS | 0.3 | 2 | | | | | | | | | |
| 0.47 | A | 5 | T110A474J075AS | 0.3 | 2 | 5103 | 5303 | 5503 | 5703 | 6256 | 7256 | 8256 | T212A474J075(2)S | |
| 0.47 | A | 10 | T110A474K075AS | 0.3 | 2 | 2394 | 2634 | 2874 | 3114 | 6257 | 7257 | 8257 | T212A474K075(2)S | |
| 0.47 | A | 20 | T110A474M075AS | 0.3 | 2 | 2395 | 2635 | 2875 | 3115 | 6258 | 7258 | 8258 | T212A474M075(2)S | |
| 0.56 | A | 5 | T110A564J075AS | 0.3 | 2 | 5104 | 5304 | 5504 | 5704 | 6259 | 7259 | 8259 | T212A564J075(2)S | |
| 0.56 | A | 10 | T110A564K075AS | 0.3 | 2 | 2396 | 2636 | 2876 | 3116 | 6260 | 7260 | 8260 | T212A564K075(2)S | |
| 0.56 | A | 20 | T110A564M075AS | 0.3 | 2 | | | | | | | | | |
| 0.68 | A | 5 | T110A684J075AS | 0.3 | 2 | 5105 | 5305 | 5505 | 5705 | 6261 | 7261 | 8261 | T212A684J075(2)S | |
| 0.68 | A | 10 | T110A684K075AS | 0.3 | 2 | 2397 | 2637 | 2877 | 3117 | 6262 | 7262 | 8262 | T212A684K075(2)S | |
| 0.68 | A | 20 | T110A684M075AS | 0.3 | 2 | 2398 | 2638 | 2878 | 3118 | 6263 | 7263 | 8263 | T212A684M075(2)S | |
| 0.82 | B | 5 | T110B824J075AS | 0.3 | 2 | 5106 | 5306 | 5506 | 5706 | 6264 | 7264 | 8264 | T212B824J075(2)S | |
| 0.82 | B | 10 | T110B824K075AS | 0.3 | 2 | 2399 | 2639 | 2879 | 3119 | 6265 | 7265 | 8265 | T212B824K075(2)S | |
| 0.82 | B | 20 | T110B824M075AS | 0.3 | 2 | | | | | | | | | |
| 1.0 | B | 5 | T110B105J075AS | 0.3 | 2 | 5107 | 5307 | 5507 | 5707 | 6266 | 7266 | 8266 | T212B105J075(2)S | |
| 1.0 | B | 10 | T110B105K075AS | 0.3 | 2 | 2400 | 2640 | 2880 | 3120 | 6267 | 7267 | 8267 | T212B105K075(2)S | |
| 1.0 | B | 20 | T110B105M075AS | 0.3 | 2 | 2401 | 2641 | 2881 | 3121 | 6268 | 7268 | 8268 | T212B105M075(2)S | |
| 1.2 | B | 5 | T110B125J075AS | 0.3 | 4 | 5108 | 5308 | 5508 | 5708 | 6269 | 7269 | 8269 | T212B125J075(2)S | |
| 1.2 | B | 10 | T110B125K075AS | 0.3 | 4 | 2402 | 2642 | 2882 | 3122 | 6270 | 7270 | 8270 | T212B125K075(2)S | |
| 1.2 | B | 20 | T110B125M075AS | 0.3 | 4 | | | | | | | | | |
| 1.5 | B | 5 | T110B155J075AS | 0.6 | 4 | 5109 | 5309 | 5509 | 5709 | 6271 | 7271 | 8271 | T212B155J075(2)S | |
| 1.5 | B | 10 | T110B155K075AS | 0.6 | 4 | 2403 | 2643 | 2883 | 3123 | 6272 | 7272 | 8272 | T212B155K075(2)S | |
| 1.5 | B | 20 | T110B155M075AS | 0.6 | 4 | 2404 | 2644 | 2884 | 3124 | 6273 | 7273 | 8273 | T212B155M075(2)S | |
| 1.8 | B | 5 | T110B185J075AS | 0.7 | 4 | 5110 | 5310 | 5510 | 5710 | 6274 | 7274 | 8274 | T212B185J075(2)S | |
| 1.8 | B | 10 | T110B185K075AS | 0.7 | 4 | 2405 | 2645 | 2885 | 3125 | 6275 | 7275 | 8275 | T212B185K075(2)S | |
| 1.8 | B | 20 | T110B185M075AS | 0.7 | 4 | | | | | | | | | |
| 2.2 | B | 5 | T110B225J075AS | 0.8 | 4 | 5111 | 5311 | 5511 | 5711 | 6276 | 7276 | 8276 | T212B225J075(2)S | |
| 2.2 | B | 10 | T110B225K075AS | 0.8 | 4 | 2406 | 2646 | 2886 | 3126 | 6277 | 7277 | 8277 | T212B225K075(2)S | |

(1) To complete T110 Series part number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.

(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.



TANTALUM HERMETICALLY SEALED / AXIAL — MIL-PRF-39003
T110 SERIES — POLAR TYPE & T212 (CSR13)

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 75 VOLT RATING AT 85°C — 50 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 2.2 | B | 20 | T110B225M075AS | 0.8 | 4 | 2407 | 2647 | 2887 | 3127 | 6278 | 7278 | 8278 | T212B225M075(2)S | |
| 2.7 | B | 5 | T110B275J075AS | 1.0 | 4 | 5112 | 5312 | 5512 | 5712 | 6279 | 7279 | 8279 | T212B275J075(2)S | |
| 2.7 | B | 10 | T110B275K075AS | 1.0 | 4 | 2408 | 2648 | 2888 | 3128 | 6280 | 7280 | 8280 | T212B275K075(2)S | |
| 2.7 | B | 20 | T110B275M075AS | 1.2 | 4 | | | | | | | | | |
| 3.3 | B | 5 | T110B335J075AS | 1.2 | 4 | 5113 | 5313 | 5513 | 5713 | 6281 | 7281 | 8281 | T212B335J075(2)S | |
| 3.3 | B | 10 | T110B335K075AS | 1.2 | 4 | 2409 | 2649 | 2889 | 3129 | 6282 | 7282 | 8282 | T212B335K075(2)S | |
| 3.3 | B | 20 | T110B335M075AS | 1.2 | 4 | 2410 | 2650 | 2890 | 3130 | 6283 | 7283 | 8283 | T212B335M075(2)S | |
| 3.9 | B | 5 | T110B395J075AS | 1.5 | 4 | 5114 | 5314 | 5514 | 5714 | 6284 | 7284 | 8284 | T212B395J075(2)S | |
| 3.9 | B | 10 | T110B395K075AS | 1.5 | 4 | 2411 | 2651 | 2891 | 3131 | 6285 | 7285 | 8285 | T212B395K075(2)S | |
| 3.9 | B | 20 | T110B395M075AS | 1.5 | 4 | | | | | | | | | |
| 4.7 | C | 5 | T110C475J075AS | 3.0 | 4 | 5115 | 5315 | 5515 | 5715 | 6286 | 7286 | 8286 | T212C475J075(2)S | |
| 4.7 | C | 10 | T110C475K075AS | 3.0 | 4 | 2412 | 2652 | 2892 | 3132 | 6287 | 7287 | 8287 | T212C475K075(2)S | |
| 4.7 | C | 20 | T110C475M075AS | 3.0 | 4 | 2413 | 2653 | 2893 | 3133 | 6288 | 7288 | 8288 | T212C475M075(2)S | |
| 5.6 | C | 5 | T110C565J075AS | 3.0 | 4 | 5116 | 5316 | 5516 | 5716 | 6289 | 7289 | 8289 | T212C565J075(2)S | |
| 5.6 | C | 10 | T110C565K075AS | 3.0 | 4 | 2414 | 2654 | 2894 | 3134 | 6290 | 7290 | 8290 | T212C565K075(2)S | |
| 5.6 | C | 20 | T110C565M075AS | 3.0 | 4 | | | | | | | | | |
| 6.8 | C | 5 | T110C685J075AS | 5.0 | 4 | 5117 | 5317 | 5517 | 5717 | 6291 | 7291 | 8291 | T212C685J075(2)S | |
| 6.8 | C | 10 | T110C685K075AS | 5.0 | 4 | 2415 | 2655 | 2895 | 3135 | 6292 | 7292 | 8292 | T212C685K075(2)S | |
| 6.8 | C | 20 | T110C685M075AS | 5.0 | 4 | 2416 | 2656 | 2896 | 3136 | 6293 | 7293 | 8293 | T212C685M075(2)S | |
| 8.2 | C | 5 | T110C825J075AS | 5.0 | 4 | 5118 | 5318 | 5518 | 5718 | 6294 | 7294 | 8294 | T212C825J075(2)S | |
| 8.2 | C | 10 | T110C825K075AS | 5.0 | 4 | 2417 | 2657 | 2897 | 3137 | 6295 | 7295 | 8295 | T212C825K075(2)S | |
| 8.2 | C | 20 | T110C825M075AS | 5.0 | 4 | | | | | | | | | |
| 10.0 | C | 5 | T110C106J075AS | 5.0 | 4 | 5119 | 5319 | 5519 | 5719 | 6296 | 7296 | 8296 | T212C106J075(2)S | |
| 10.0 | C | 10 | T110C106K075AS | 5.0 | 4 | 2418 | 2658 | 2898 | 3138 | 6297 | 7297 | 8297 | T212C106K075(2)S | |
| 10.0 | C | 20 | T110C106M075AS | 5.0 | 4 | 2419 | 2659 | 2899 | 3139 | 6298 | 7298 | 8298 | T212C106M075(2)S | |
| 12.0 | D | 5 | T110D126J075AS | 5.0 | 4 | 5120 | 5320 | 5520 | 5720 | 6299 | 7299 | 8299 | T212D126J075(2)S | |
| 12.0 | D | 10 | T110D126K075AS | 5.0 | 4 | 2420 | 2660 | 2900 | 3140 | 6300 | 7300 | 8300 | T212D126K075(2)S | |
| 12.0 | D | 20 | T110D126M075AS | 5.0 | 4 | | | | | | | | | |
| 15.0 | D | 5 | T110D156J075AS | 7.0 | 4 | 5121 | 5321 | 5521 | 5721 | 6301 | 7301 | 8301 | T212D156J075(2)S | |
| 15.0 | D | 10 | T110D156K075AS | 7.0 | 4 | 2421 | 2661 | 2901 | 3141 | 6302 | 7302 | 8302 | T212D156K075(2)S | |
| 15.0 | D | 20 | T110D156M075AS | 7.0 | 4 | 2422 | 2662 | 2902 | 3142 | 6303 | 7303 | 8303 | T212D156M075(2)S | |
| 100 VOLT RATING AT 85°C — 67 VOLT RATING AT 125° | | | | | | | | | | | | | | |
| 0.0047 | A | 5 | T110A472J100AS | 0.3 | 2 | 5122 | 5322 | 5522 | 5722 | 6304 | 7304 | * | T212A472J100(2)S | |
| 0.0047 | A | 10 | T110A472K100AS | 0.3 | 2 | 2423 | 2663 | 2903 | 3143 | 6305 | 7305 | * | T212A472K100(2)S | |
| 0.0047 | A | 20 | T110A472M100AS | 0.3 | 2 | 2424 | 2664 | 2904 | 3144 | 6306 | 7306 | * | T212A472M100(2)S | |
| 0.0056 | A | 5 | T110A562J100AS | 0.3 | 2 | 5123 | 5323 | 5523 | 5723 | 6307 | 7307 | * | T212A562J100(2)S | |
| 0.0056 | A | 10 | T110A562K100AS | 0.3 | 2 | 2425 | 2665 | 2905 | 3145 | 6308 | 7308 | * | T212A562K100(2)S | |
| 0.0056 | A | 20 | T110A562M100AS | 0.3 | 2 | | | | | | | | | |
| 0.0068 | A | 5 | T110A682J100AS | 0.3 | 2 | 5124 | 5324 | 5524 | 5724 | 6309 | 7309 | * | T212A682J100(2)S | |
| 0.0068 | A | 10 | T110A682K100AS | 0.3 | 2 | 2426 | 2666 | 2906 | 3146 | 6310 | 7310 | * | T212A682K100(2)S | |
| 0.0068 | A | 20 | T110A682M100AS | 0.3 | 2 | 2427 | 2667 | 2907 | 3147 | 6311 | 7311 | * | T212A682M100(2)S | |
| 0.0082 | A | 5 | T110A822J100AS | 0.3 | 2 | 5125 | 5325 | 5525 | 5725 | 6312 | 7312 | * | T212A822J100(2)S | |
| 0.0082 | A | 10 | T110A822K100AS | 0.3 | 2 | 2428 | 2668 | 2908 | 3148 | 6313 | 7313 | * | T212A822K100(2)S | |
| 0.0082 | A | 20 | T110A822M100AS | 0.3 | 2 | | | | | | | | | |
| 0.01 | A | 5 | T110A103J100AS | 0.3 | 2 | 5126 | 5326 | 5526 | 5726 | 6314 | 7314 | * | T212A103J100(2)S | |
| 0.01 | A | 10 | T110A103K100AS | 0.3 | 2 | 2429 | 2669 | 2909 | 3149 | 6315 | 7315 | * | T212A103K100(2)S | |
| 0.01 | A | 20 | T110A103M100AS | 0.3 | 2 | 2430 | 2670 | 2910 | 3150 | 6316 | 7316 | * | T212A103M100(2)S | |
| 0.012 | A | 5 | T110A123J100AS | 0.3 | 2 | 5127 | 5327 | 5527 | 5727 | 6317 | 7317 | * | T212A123J100(2)S | |
| 0.012 | A | 10 | T110A123K100AS | 0.3 | 2 | 2431 | 2671 | 2911 | 3151 | 6318 | 7318 | * | T212A123K100(2)S | |
| 0.012 | A | 20 | T110A123M100AS | 0.3 | 2 | | | | | | | | | |
| 0.015 | A | 5 | T110A153J100AS | 0.3 | 2 | 5128 | 5328 | 5528 | 5728 | 6319 | 7319 | * | T212A153J100(2)S | |
| 0.015 | A | 10 | T110A153K100AS | 0.3 | 2 | 2432 | 2672 | 2912 | 3152 | 6320 | 7320 | * | T212A153K100(2)S | |
| 0.015 | A | 20 | T110A153M100AS | 0.3 | 2 | 2433 | 2673 | 2913 | 3153 | 6321 | 7321 | * | T212A153M100(2)S | |
| 0.018 | A | 5 | T110A183J100AS | 0.3 | 2 | 5129 | 5329 | 5529 | 5729 | 6322 | 7322 | * | T212A183J100(2)S | |
| 0.018 | A | 10 | T110A183K100AS | 0.3 | 2 | 2434 | 2674 | 2914 | 3154 | 6323 | 7323 | * | T212A183K100(2)S | |
| 0.018 | A | 20 | T110A183M100AS | 0.3 | 2 | | | | | | | | | |
| 0.022 | A | 5 | T110A223J100AS | 0.3 | 2 | 5130 | 5330 | 5530 | 5730 | 6324 | 7324 | * | T212A223J100(2)S | |
| 0.022 | A | 10 | T110A223K100AS | 0.3 | 2 | 2435 | 2675 | 2915 | 3155 | 6325 | 7325 | * | T212A223K100(2)S | |

(1) To complete T110 Series part number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.

(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.

*Note: D Failure Rate — Not QPL for -8304 thru -8401.

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER | |
|---|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|--|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 100 VOLT RATING AT 85°C — 67 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 0.022 | A | 20 | T110A223M100AS | 0.3 | 2 | 2436 | 2676 | 2916 | 3156 | 6326 | 7326 | * | T212A223M100(2)S | |
| 0.027 | A | 5 | T110A273J100AS | 0.3 | 2 | 5131 | 5331 | 5531 | 5731 | 6327 | 7327 | * | T212A273J100(2)S | |
| 0.027 | A | 10 | T110A273K100AS | 0.3 | 2 | 2437 | 2677 | 2917 | 3157 | 6328 | 7328 | * | T212A273K100(2)S | |
| 0.027 | A | 20 | T110A273M100AS | 0.3 | 2 | | | | | | | | | |
| 0.033 | A | 5 | T110A333J100AS | 0.3 | 2 | 5132 | 5332 | 5532 | 5732 | 6329 | 7329 | * | T212A333J100(2)S | |
| 0.033 | A | 10 | T110A333K100AS | 0.3 | 2 | 2438 | 2678 | 2918 | 3158 | 6330 | 7330 | * | T212A333K100(2)S | |
| 0.033 | A | 20 | T110A333M100AS | 0.3 | 2 | 2439 | 2679 | 2919 | 3159 | 6331 | 7331 | * | T212A333M100(2)S | |
| 0.039 | A | 5 | T110A393J100AS | 0.3 | 2 | 5133 | 5333 | 5533 | 5733 | 6332 | 7332 | * | T212A393J100(2)S | |
| 0.039 | A | 10 | T110A393K100AS | 0.3 | 2 | 2440 | 2680 | 2920 | 3160 | 6333 | 7333 | * | T212A393K100(2)S | |
| 0.039 | A | 20 | T110A393M100AS | 0.3 | 2 | | | | | | | | | |
| 0.047 | A | 5 | T110A473J100AS | 0.3 | 2 | 5134 | 5334 | 5534 | 5734 | 6334 | 7334 | * | T212A473J100(2)S | |
| 0.047 | A | 10 | T110A473K100AS | 0.3 | 2 | 2441 | 2681 | 2921 | 3161 | 6335 | 7335 | * | T212A473K100(2)S | |
| 0.047 | A | 20 | T110A473M100AS | 0.3 | 2 | 2442 | 2682 | 2922 | 3162 | 6336 | 7336 | * | T212A473M100(2)S | |
| 0.056 | A | 5 | T110A563J100AS | 0.3 | 2 | 5135 | 5335 | 5535 | 5735 | 6337 | 7337 | * | T212A563J100(2)S | |
| 0.056 | A | 10 | T110A563K100AS | 0.3 | 2 | 2443 | 2683 | 2923 | 3163 | 6338 | 7338 | * | T212A563K100(2)S | |
| 0.056 | A | 20 | T110A563M100AS | 0.3 | 2 | | | | | | | | | |
| 0.068 | A | 5 | T110A683J100AS | 0.3 | 2 | 5136 | 5336 | 5536 | 5736 | 6339 | 7339 | * | T212A683J100(2)S | |
| 0.068 | A | 10 | T110A683K100AS | 0.3 | 2 | 2444 | 2684 | 2924 | 3164 | 6340 | 7340 | * | T212A683K100(2)S | |
| 0.068 | A | 20 | T110A683M100AS | 0.3 | 2 | 2445 | 2685 | 2925 | 3165 | 6341 | 7341 | * | T212A683M100(2)S | |
| 0.082 | A | 5 | T110A823J100AS | 0.3 | 2 | 5137 | 5337 | 5537 | 5737 | 6342 | 7342 | * | T212A823J100(2)S | |
| 0.082 | A | 10 | T110A823K100AS | 0.3 | 2 | 2446 | 2686 | 2926 | 3166 | 6343 | 7343 | * | T212A823K100(2)S | |
| 0.082 | A | 20 | T110A823M100AS | 0.3 | 2 | | | | | | | | | |
| 0.1 | A | 5 | T110A104J100AS | 0.3 | 2 | 5138 | 5338 | 5538 | 5738 | 6344 | 7344 | * | T212A104J100(2)S | |
| 0.1 | A | 10 | T110A104K100AS | 0.3 | 2 | 2447 | 2687 | 2927 | 3167 | 6345 | 7345 | * | T212A104K100(2)S | |
| 0.1 | A | 20 | T110A104M100AS | 0.3 | 2 | 2448 | 2688 | 2928 | 3168 | 6346 | 7346 | * | T212A104M100(2)S | |
| 0.12 | A | 5 | T110A124J100AS | 0.3 | 2 | 5139 | 5339 | 5539 | 5739 | 6347 | 7347 | * | T212A124J100(2)S | |
| 0.12 | A | 10 | T110A124K100AS | 0.3 | 2 | 2449 | 2689 | 2929 | 3169 | 6348 | 7348 | * | T212A124K100(2)S | |
| 0.12 | A | 20 | T110A124M100AS | 0.3 | 2 | | | | | | | | | |
| 0.15 | A | 5 | T110A154J100AS | 0.3 | 2 | 5140 | 5340 | 5540 | 5740 | 6349 | 7349 | * | T212A154J100(2)S | |
| 0.15 | A | 10 | T110A154K100AS | 0.3 | 2 | 2450 | 2690 | 2930 | 3170 | 6350 | 7350 | * | T212A154K100(2)S | |
| 0.15 | A | 20 | T110A154M100AS | 0.3 | 2 | 2451 | 2691 | 2931 | 3171 | 6351 | 7351 | * | T212A154M100(2)S | |
| 0.18 | A | 5 | T110A184J100AS | 0.3 | 2 | 5141 | 5341 | 5541 | 5741 | 6352 | 7352 | * | T212A184J100(2)S | |
| 0.18 | A | 10 | T110A184K100AS | 0.3 | 2 | 2452 | 2692 | 2932 | 3172 | 6353 | 7353 | * | T212A184K100(2)S | |
| 0.18 | A | 20 | T110A184M100AS | 0.3 | 2 | | | | | | | | | |
| 0.22 | A | 5 | T110A224J100AS | 0.3 | 2 | 5142 | 5342 | 5542 | 5742 | 6354 | 7354 | * | T212A224J100(2)S | |
| 0.22 | A | 10 | T110A224K100AS | 0.3 | 2 | 2453 | 2693 | 2933 | 3173 | 6355 | 7355 | * | T212A224K100(2)S | |
| 0.22 | A | 20 | T110A224M100AS | 0.3 | 2 | 2454 | 2694 | 2934 | 3174 | 6356 | 7356 | * | T212A224M100(2)S | |
| 0.27 | A | 5 | T110A274J100AS | 0.3 | 2 | 5143 | 5343 | 5543 | 5743 | 6357 | 7357 | * | T212A274J100(2)S | |
| 0.27 | A | 10 | T110A274K100AS | 0.3 | 2 | 2455 | 2695 | 2935 | 3175 | 6358 | 7358 | * | T212A274K100(2)S | |
| 0.27 | A | 20 | T110A274M100AS | 0.3 | 2 | | | | | | | | | |
| 0.33 | A | 5 | T110A334J100AS | 0.3 | 2 | 5144 | 5344 | 5544 | 5744 | 6359 | 7359 | * | T212A334J100(2)S | |
| 0.33 | A | 10 | T110A334K100AS | 0.3 | 2 | 2456 | 2696 | 2936 | 3176 | 6360 | 7360 | * | T212A334K100(2)S | |
| 0.33 | A | 20 | T110A334M100AS | 0.3 | 2 | 2457 | 2697 | 2937 | 3177 | 6361 | 7361 | * | T212A334M100(2)S | |
| 0.39 | A | 5 | T110A394J100AS | 0.3 | 2 | 5145 | 5345 | 5545 | 5745 | 6362 | 7362 | * | T212A394J100(2)S | |
| 0.39 | A | 10 | T110A394K100AS | 0.3 | 2 | 2458 | 2698 | 2938 | 3178 | 6363 | 7363 | * | T212A394K100(2)S | |
| 0.39 | A | 20 | T110A394M100AS | 0.3 | 2 | | | | | | | | | |
| 0.47 | A | 5 | T110A474J100AS | 0.3 | 2 | 5146 | 5346 | 5546 | 5746 | 6364 | 7364 | * | T212A474J100(2)S | |
| 0.47 | A | 10 | T110A474K100AS | 0.3 | 2 | 2459 | 2699 | 2939 | 3179 | 6365 | 7365 | * | T212A474K100(2)S | |
| 0.47 | A | 20 | T110A474M100AS | 0.3 | 2 | 2460 | 2700 | 2940 | 3180 | 6366 | 7366 | * | T212A474M100(2)S | |
| 0.56 | A | 5 | T110A564J100AS | 0.3 | 2 | 5147 | 5347 | 5547 | 5747 | 6367 | 7367 | * | T212A564J100(2)S | |
| 0.56 | A | 10 | T110A564K100AS | 0.3 | 2 | 2461 | 2701 | 2941 | 3181 | 6368 | 7368 | * | T212A564K100(2)S | |
| 0.56 | A | 20 | T110A564M100AS | 0.3 | 2 | | | | | | | | | |
| 0.68 | B | 5 | T110B684J100AS | 0.3 | 2 | 5148 | 5348 | 5548 | 5748 | 6369 | 7369 | * | T212B684J100(2)S | |
| 0.68 | B | 10 | T110B684K100AS | 0.3 | 2 | 2462 | 2702 | 2942 | 3182 | 6370 | 7370 | * | T212B684K100(2)S | |
| 0.68 | B | 20 | T110B684M100AS | 0.3 | 2 | 2463 | 2703 | 2943 | 3183 | 6371 | 7371 | * | T212B684M100(2)S | |
| 0.82 | B | 5 | T110B824J100AS | 0.4 | 2 | 5149 | 5349 | 5549 | 5749 | 6372 | 7372 | * | T212B824J100(2)S | |
| 0.82 | B | 10 | T110B824K100AS | 0.4 | 2 | 2464 | 2704 | 2944 | 3184 | 6373 | 7373 | * | T212B824K100(2)S | |
| 0.82 | B | 20 | T110B824M100AS | 0.4 | 2 | | | | | | | | | |
| 1.0 | B | 5 | T110B105J100AS | 0.5 | 2 | 5150 | 5350 | 5550 | 5750 | 6374 | 7374 | * | T212B105J100(2)S | |
| 1.0 | B | 10 | T110B105K100AS | 0.5 | 2 | 2465 | 2705 | 2945 | 3185 | 6375 | 7375 | * | T212B105K100(2)S | |
| 1.0 | B | 20 | T110B105M100AS | 0.5 | 2 | 2466 | 2706 | 2946 | 3186 | 6376 | 7376 | * | T212B105M100(2)S | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.
 (2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.
Bold Face lines indicate popular part types and values.
 *Note: D Failure Rate — Not QPL for -8304 thru -8401.

T110/T212 Series Tantalum
Hermetically Sealed



TANTALUM HERMETICALLY SEALED / AXIAL — MIL-PRF-39003
T110 SERIES — POLAR TYPE & T212 (CSR13)

RATINGS & PART NUMBER REFERENCE

| CAPACITANCE μF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|---|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|------------------|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE μA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 100 VOLT RATING AT 85°C — 67 VOLT RATING AT 125°C (Cont'd) | | | | | | | | | | | | | | |
| 1.2 | B | 5 | T110B125J100AS | 0.5 | 3 | 5151 | 5351 | 5551 | 5751 | 6377 | 7377 | * | T212B125J100(2)S | |
| 1.2 | B | 10 | T110B125K100AS | 0.5 | 3 | 2467 | 2707 | 2947 | 3187 | 6378 | 7378 | * | T212B125K100(2)S | |
| 1.2 | B | 20 | T110B125M100AS | 0.5 | 3 | | | | | | | | | |
| 1.5 | B | 5 | T110B155J100AS | 0.7 | 3 | 5152 | 5352 | 5552 | 5752 | 6379 | 7379 | * | T212B155J100(2)S | |
| 1.5 | B | 10 | T110B155K100AS | 0.7 | 3 | 2468 | 2708 | 2948 | 3188 | 6380 | 7380 | * | T212B155K100(2)S | |
| 1.5 | B | 20 | T110B155M100AS | 0.7 | 3 | 2469 | 2709 | 2949 | 3189 | 6381 | 7381 | * | T212B155M100(2)S | |
| 1.8 | B | 5 | T110B185J100AS | 0.7 | 3 | 5153 | 5353 | 5553 | 5753 | 6382 | 7382 | * | T212B185J100(2)S | |
| 1.8 | B | 10 | T110B185K100AS | 0.7 | 3 | 2470 | 2710 | 2950 | 3190 | 6383 | 7383 | * | T212B185K100(2)S | |
| 1.8 | B | 20 | T110B185M100AS | 0.7 | 3 | | | | | | | | | |
| 2.2 | B | 5 | T110B225J100AS | 0.9 | 3 | 5154 | 5354 | 5554 | 5754 | 6384 | 7384 | * | T212B225J100(2)S | |
| 2.2 | B | 10 | T110B225K100AS | 0.9 | 3 | 2471 | 2711 | 2951 | 3191 | 6385 | 7385 | * | T212B225K100(2)S | |
| 2.2 | B | 20 | T110B225M100AS | 0.9 | 3 | 2472 | 2712 | 2952 | 3192 | 6386 | 7386 | * | T212B225M100(2)S | |
| 2.7 | B | 5 | T110B275J100AS | 1.1 | 3 | 5155 | 5355 | 5555 | 5755 | 6387 | 7387 | * | T212B275J100(2)S | |
| 2.7 | B | 10 | T110B275K100AS | 1.1 | 3 | 2473 | 2713 | 2953 | 3193 | 6388 | 7388 | * | T212B275K100(2)S | |
| 2.7 | B | 20 | T110B275M100AS | 1.1 | 3 | | | | | | | | | |
| 3.3 | C | 5 | T110C335J100AS | 1.5 | 3 | 5156 | 5356 | 5556 | 5756 | 6389 | * | * | T212C335J100(2)S | |
| 3.3 | C | 10 | T110C335K100AS | 1.5 | 3 | 5157 | 5357 | 5557 | 5757 | 6390 | * | * | T212C335K100(2)S | |
| 3.3 | C | 20 | T110C335M100AS | 1.5 | 3 | 5158 | 5358 | 5558 | 5758 | 6391 | * | * | T212C335M100(2)S | |
| 3.9 | C | 5 | T110C395J100AS | 1.5 | 3 | 5159 | 5359 | 5559 | 5759 | 6392 | * | * | T212C395J100(2)S | |
| 3.9 | C | 10 | T110C395K100AS | 1.5 | 3 | 5160 | 5360 | 5560 | 5760 | 6393 | * | * | T212C395K100(2)S | |
| 4.7 | C | 5 | T110C475J100AS | 2.5 | 3 | 5161 | 5361 | 5561 | 5761 | 6394 | * | * | T212C475J100(2)S | |
| 4.7 | C | 10 | T110C475K100AS | 2.5 | 3 | 5162 | 5362 | 5562 | 5762 | 6395 | * | * | T212C475K100(2)S | |
| 4.7 | C | 20 | T110C475M100AS | 2.5 | 3 | 5163 | 5363 | 5563 | 5763 | 6396 | * | * | T212C475M100(2)S | |
| 5.6 | C | 5 | T110C565J100AS | 2.5 | 3 | 5164 | 5364 | 5564 | 5764 | 6397 | * | * | T212C565J100(2)S | |
| 5.6 | C | 10 | T110C565K100AS | 2.5 | 3 | 5165 | 5365 | 5565 | 5765 | 6398 | * | * | T212C565K100(2)S | |
| 6.8 | C | 5 | T110C685J100AS | 2.5 | 3 | 5166 | 5366 | 5566 | 5766 | 6399 | * | * | T212C685J100(2)S | |
| 6.8 | C | 10 | T110C685K100AS | 2.5 | 3 | 5167 | 5367 | 5567 | 5767 | 6400 | * | * | T212C685K100(2)S | |
| 6.8 | C | 20 | T110C685M100AS | 2.5 | 3 | 5168 | 5368 | 5568 | 5768 | 6401 | * | * | T212C685M100(2)S | |
| 8.2 | D | 5,10,20 | T110D825(1)100AS | 5.0 | 3 | | | | | | | | | |
| 10.0 | D | 5,10,20 | T110D106(1)100AS | 5.0 | 3 | | | | | | | | | |
| 125 VOLT RATING AT 85°C — 82 VOLT RATING AT 125° | | | | | | | | | | | | | | |
| 0.0047 | A | 5,10,20 | T110A472(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.0056 | A | 5,10,20 | T110A562(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.0068 | A | 5,10,20 | T110A682(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.0082 | A | 5,10,20 | T110A822(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.01 | A | 5,10,20 | T110A103(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.012 | A | 5,10,20 | T110A123(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.015 | A | 5,10,20 | T110A153(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.018 | A | 5,10,20 | T110A183(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.022 | A | 5,10,20 | T110A223(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.027 | A | 5,10,20 | T110A273(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.033 | A | 5,10,20 | T110A333(1)125AS | 0.5 | 3 | | | | | | | | | |
| 0.039 | A | 5,10,20 | T110A393(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.047 | A | 5,10,20 | T110A473(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.056 | A | 5,10,20 | T110A563(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.068 | A | 5,10,20 | T110A683(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.082 | A | 5,10,20 | T110A823(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.1 | A | 5,10,20 | T110A104(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.12 | A | 5,10,20 | T110A124(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.15 | A | 5,10,20 | T110A154(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.18 | A | 5,10,20 | T110A184(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.22 | A | 5,10,20 | T110A224(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.27 | A | 5,10,20 | T110A274(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.33 | A | 5,10,20 | T110A334(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.39 | B | 5,10,20 | T110B394(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.47 | B | 5,10,20 | T110B474(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.56 | B | 5,10,20 | T110B564(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.68 | B | 5,10,20 | T110B684(1)125AS | 1.5 | 3 | | | | | | | | | |
| 0.82 | B | 5,10,20 | T110B824(1)125AS | 1.5 | 3 | | | | | | | | | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.

(2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.

Bold Face lines indicate popular part types and values.

*Note: C failure rate — Not QPL for 7389 thru 7401.

D failure rate — Not QPL for -8304 thru -8401.



RATINGS & PART NUMBER REFERENCE

| CAPACITANCE µF | CASE SIZE | CAPACITANCE TOLERANCE ±% | KEMET T110 | | | MIL-PRF-39003 (CSR13) CAPACITORS | | | | | | | | KEMET EQUIVALENT MILITARY PART NUMBER |
|--|--------------|--------------------------------|----------------------|------------------------------------|---|---|------------|-------------|--------------|----------------------------|-------------|--------------|--|--|
| | | | KEMET PART NUMBER | D.C. LEAKAGE µA@25°C MAX. | MAX. DISSIPATION FACTOR %@25°C, 120Hz | DASH NUMBER REFERENCE FAILURE RATE LEVEL (%/1000 HRS.) | | | | | | | | |
| | | | | | | MIL-PRF-39003/1H EXPONENTIAL | | | | MIL-PRF-39003/1H GRADED | | | | |
| | | | | | | M (1.0) | P (0.1) | R (0.01) | S (0.001) | B (0.1) | C (0.01) | D (0.001) | | |
| 125 VOLT RATING AT 85°C — 82 VOLT RATING AT 125°C | | | | | | | | | | | | | | |
| 1.0 | B | 5,10,20 | T110B105(1)125AS | 1.5 | 3 | | | | | | | | | |
| 1.2 | B | 5,10,20 | T110B125(1)125AS | 1.5 | 3 | | | | | | | | | |
| 1.5 | B | 5,10,20 | T110B155(1)125AS | 1.5 | 3 | | | | | | | | | |
| 1.8 | B | 5,10,20 | T110B185(1)125AS | 1.5 | 3 | | | | | | | | | |
| 2.2 | B | 5,10,20 | T110B225(1)125AS | 1.5 | 3 | | | | | | | | | |
| 2.7 | C | 5,10,20 | T110C275(1)125AS | 2.0 | 3 | | | | | | | | | |
| 3.3 | C | 5,10,20 | T110C335(1)125AS | 2.0 | 3 | | | | | | | | | |
| 3.9 | C | 5,10,20 | T110C395(1)125AS | 2.0 | 3 | | | | | | | | | |
| 4.7 | C | 5,10,20 | T110C475(1)125AS | 3.0 | 3 | | | | | | | | | |
| 5.6 | C | 5,10,20 | T110C565(1)125AS | 3.0 | 3 | | | | | | | | | |
| 6.8 | C | 5,10,20 | T110C685(1)125AS | 3.0 | 3 | | | | | | | | | |
| 8.2 | D | 5,10,20 | T110D825(1)125AS | 6.0 | 3 | | | | | | | | | |
| 10.0 | D | 5,10,20 | T110D106(1)125AS | 6.0 | 3 | | | | | | | | | |

(1) To complete T110 Series Part Number, insert Capacitance Tolerance Symbol in the 9th Character as shown on Page 6.
 (2) To complete the T212 Series Part Number, insert Failure Rate Symbol in the 13th Character.
Bold Face lines indicate popular part types and values.

**T110/T212 Series Tantalum
Hermetically Sealed**

T110/T140 Herm Seal 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 T110/T140 Series product.)

| Cap µF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 30 Volt | 35 Volt | 50 Volt | 60 Volt | 75 Volt | 100 Volt | 125 Volt |
|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| 0.10 | | | | 37.0 | | 26.0 | 26.0 | 26.0 | 26.0 | 25.0 | 25.0 |
| 0.12 | | | | 37.0 | | 26.0 | 26.0 | 26.0 | 26.0 | 25.0 | 25.0 |
| 0.15 | | | | 32.0 | | 21.0 | 21.0 | 21.0 | 21.0 | 20.0 | 20.0 |
| 0.18 | | | | 32.0 | | 21.0 | 21.0 | 21.0 | 21.0 | 20.0 | 20.0 |
| 0.22 | | | | 27.0 | | 17.0 | 17.0 | 17.0 | 17.0 | 16.0 | 16.0 |
| 0.27 | | | | 25.0 | | 17.0 | 17.0 | 17.0 | 17.0 | 16.0 | 16.0 |
| 0.33 | | | 28.0 | 22.0 | | 15.0 | 15.0 | 15.0 | 15.0 | 14.0 | 14.0 |
| 0.39 | | | 28.0 | 22.0 | | 15.0 | 15.0 | 15.0 | 15.0 | 14.0 | 14.0 |
| 0.47 | | | 26.0 | 20.0 | | 13.0 | 13.0 | 13.0 | 13.0 | 12.0 | 12.0 |
| 0.56 | | | 26.0 | 18.0 | | 13.0 | 13.0 | 13.0 | 13.0 | 12.0 | 12.0 |
| 0.68 | | | 24.0 | 16.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 9.0 | 9.0 |
| 0.82 | | | 24.0 | 16.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 9.0 | 9.0 |
| 1.0 | | 20.0 | 17.0 | 10.0 | | 8.0 | 8.0 | 8.0 | 8.0 | 7.0 | 7.0 |
| 1.2 | | 20.0 | 17.0 | 10.0 | 9.0 | 8.0 | 8.0 | 8.0 | 8.0 | 7.0 | 7.0 |
| 1.5 | | 14.0 | 10.0 | 9.0 | 8.0 | 6.0 | 5.0 | 5.0 | 5.0 | 4.0 | 4.0 |
| 1.8 | | 14.0 | 10.0 | 9.0 | 8.0 | 6.0 | 5.0 | 5.0 | 5.0 | 4.0 | 4.0 |
| 2.2 | 14.0 | 13.0 | 8.0 | 7.0 | 6.0 | 5.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.0 |
| 2.7 | 14.0 | 13.0 | 8.0 | 7.0 | 6.0 | 5.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.0 |
| 3.3 | 13.0 | 10.0 | 6.0 | 5.5 | | 4.0 | 3.0 | 3.0 | 3.0 | 2.5 | 2.5 |
| 3.9 | 13.0 | 10.0 | 6.0 | 5.5 | | 4.0 | 3.0 | 3.0 | 3.0 | 2.5 | 2.5 |
| 4.7 | 10.0 | 8.0 | 5.0 | 4.5 | | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 |
| 5.6 | 10.0 | 8.0 | 5.0 | 4.5 | | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 |
| 6.8 | 8.0 | 6.0 | 4.0 | 3.6 | | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 |
| 8.2 | 8.0 | 6.0 | 4.0 | 3.6 | | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 |
| 10.0 | 6.0 | 5.0 | 3.2 | 2.9 | | 2.0 | 1.6 | 1.6 | 1.6 | 1.0 | 1.0 |
| 12.0 | 6.0 | 5.0 | 3.2 | 2.9 | 2.5 | 2.0 | 1.6 | 1.6 | 1.6 | | |
| 15.0 | 5.0 | 3.7 | 2.5 | 2.3 | 2.0 | 1.6 | 1.2 | 1.2 | 1.2 | | |
| 18.0 | 5.0 | 3.7 | 2.5 | 2.3 | 2.0 | 1.6 | 1.2 | 1.2 | | | |
| 22.0 | 3.7 | 2.7 | 2.0 | 1.8 | | 1.3 | 1.0 | 1.0 | | | |
| 27.0 | 3.7 | 2.7 | 2.0 | 1.8 | | 1.3 | 1.0 | 1.0 | | | |
| 33.0 | 3.0 | 2.1 | 1.6 | 1.4 | 1.2 | 1.0 | 0.8 | 0.8 | | | |
| 39.0 | 3.0 | 2.1 | 1.6 | 1.4 | 1.2 | 1.0 | 0.8 | | | | |
| 47.0 | 2.0 | 1.7 | 1.3 | 1.2 | 1.0 | 0.8 | 0.6 | | | | |
| 56.0 | 2.0 | 1.7 | 1.3 | 1.2 | 1.0 | 0.8 | | | | | |
| 68.0 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | 0.6 | | | | | |
| 82.0 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | 0.6 | | | | | |
| 100.0 | 1.6 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | | | | | |
| 120.0 | 1.6 | 1.0 | 0.8 | 0.6 | | | | | | | |
| 150.0 | 0.9 | 0.8 | 0.6 | 0.5 | | | | | | | |
| 180.0 | 0.9 | 0.8 | 0.6 | 0.5 | | | | | | | |
| 220.0 | 0.9 | 0.6 | 0.5 | | | | | | | | |
| 270.0 | 0.9 | 0.6 | 0.5 | | | | | | | | |
| 330.0 | 0.7 | 0.5 | 0.4 | | | | | | | | |
| 390.0 | 0.7 | 0.5 | | | | | | | | | |
| 470.0 | 0.5 | 0.5 | | | | | | | | | |
| 560.0 | 0.5 | 0.5 | | | | | | | | | |
| 680.0 | 0.3 | | | | | | | | | | |
| 820.0 | 0.3 | | | | | | | | | | |
| 1000.0 | 0.12 | | | | | | | | | | |
| 1200.0 | 0.12 | | | | | | | | | | |

T110 Herm Seal LOW ESR (OHMS) at 100 kHz @ +25°C
 The ESR values provided below may be ordered using KEMET Customer Specification 2864.

| Cap µF | 6 Volt | 10 Volt | 15 Volt | 20 Volt | 35 Volt | 50 Volt |
|-----------|-----------|------------|------------|------------|------------|------------|
| 5.6 | | | | | | 0.300 |
| 6.8 | | | | | | 0.275 |
| 8.2 | | | | | 0.250 | 0.250 |
| 10.0 | | | | | 0.230 | 0.230 |
| 12.0 | | | | | 0.210 | 0.210 |
| 15.0 | | | | | 0.190 | 0.190 |
| 18.0 | | | | | 0.175 | 0.175 |
| 22.0 | | | | | 0.160 | 0.160 |
| 27.0 | | | | 0.145 | 0.145 | |
| 33.0 | | | | 0.130 | 0.130 | |
| 39.0 | | | | 0.120 | 0.120 | |
| 47.0 | | | | 0.110 | 0.110 | |
| 56.0 | | | 0.100 | 0.100 | | |
| 68.0 | | | 0.095 | 0.095 | | |
| 82.0 | | 0.085 | 0.085 | 0.085 | | |
| 100.0 | | 0.075 | 0.075 | 0.075 | | |
| 120.0 | | 0.070 | 0.070 | | | |
| 150.0 | 0.065 | 0.065 | | | | |
| 180.0 | 0.060 | 0.060 | | | | |
| 220.0 | 0.055 | 0.055 | | | | |
| 270.0 | 0.050 | | | | | |
| 330.0 | 0.045 | | | | | |