

TWA-E Series



CECC Wet Electrolytic Tantalum Capacitor



The TWA-E series is an axial leaded wet electrolytic tantalum capacitor manufactured in EU in accordance with CECC 30 202-001. High capacitance cathode system allows high level of CV (Capacitance/Voltage) in DSCC compatible case sizes.

This design includes a welded tantalum can and header assembly that provides a hermetic seal to withstand harsh shock and vibration requirements of MIL-PRF-39006.

Customized capacitance and voltage packages are possible and welcomed. Contact the factory about design possibilities beyond those contained in this datasheet.

OUTLINE DIMENSIONS



CASE DIMENSIONS: millimeters (inches)

| DSCC Case Size | AVX Case Size | L +0.79 (0.031) -0.41 (0.016) | D | | E ±6.35 (0.250) |
|----------------|---------------|-------------------------------------|--|-------------------------------|--------------------|
| | | | Without Insulating Sleeve ±0.41 (0.016) | With Insulating Sleeve Max | |
| T1 | A | 11.51 (0.453) | 4.78 (0.188) | 5.56 (0.219) | 38.10 (1.500) |
| T2 | B | 16.28 (0.641) | 7.14 (0.281) | 7.92 (0.312) | 57.15 (2.250) |
| T3 | D | 19.46 (0.766) | 9.52 (0.375) | 10.31 (0.406) | 57.15 (2.250) |
| T4 | E | 26.97 (1.062) | 9.52 (0.375) | 10.31 (0.406) | 57.15 (2.250) |

VOLTAGE RATINGS (Operating Temperature -55°C to 125°C)

| Voltage (DC) | | | | | | | | |
|------------------------------------|-------|------|------|------|----|------|-----|-----|
| Rated Voltage: (V _R) | 85°C | 25 | 30 | 50 | 60 | 75 | 100 | 125 |
| Derated Voltage: (V _C) | 125°C | 15 | 20 | 30 | 40 | 50 | 65 | 85 |
| Surge Voltage: (V _S) | 85°C | 28.8 | 34.5 | 57.5 | 69 | 86.3 | 115 | 144 |



TWA-E Series



CECC Wet Electrolytic Tantalum Capacitor

HOW TO ORDER

AVX PART NUMBER:

| | | | | | | | | | | | |
|------------|-----------|--|---|--------------|--|----------------------------|---|---------------------------|--------------------------------|--|--------------------------------------|
| TWA | D | 337 | * | 050 | □ | B | E | Z | 0 | ^ | 00 |
| Type | Case Size | Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | Capacitance Tolerance K = ±10% M = ±20% | Voltage Code | Insulation Sleeve C = Without Sleeve S = With Sleeve | Packaging B = Tray Pack | Inspection Level E = In accordance with CECC testing | Reliability Z = Non-ER | Qualification Level 0 = N/A | Termination Finish 0 = Sn/Pb 60/40 7 = Matte tin | Custom Test Options 00 = Standard |




LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT
For RoHS compliant products, please select correct termination style.

RIPPLE CURRENT MULTIPLIERS vs. Frequency, temperature and applied voltage^{1/2/}

| Frequency of Applied Ripple Current | | 120Hz | | | | 800Hz | | | | 1kHz | | | | |
|-------------------------------------|------|------------------------------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| | | Ambient Still Air Temperature (°C) | | | | | | | | | | | | |
| | | ≤55 | 85 | 105 | 125 | ≤55 | 85 | 105 | 125 | ≤55 | 85 | 105 | 125 | |
| % of 85°C Rated Peak | 100% | 0.60 | 0.39 | – | – | 0.71 | 0.43 | – | – | 0.72 | 0.45 | – | – | |
| | 90% | 0.60 | 0.46 | – | – | 0.71 | 0.55 | – | – | 0.72 | 0.55 | – | – | |
| Voltage | 80% | 0.60 | 0.52 | 0.35 | – | 0.71 | 0.62 | 0.42 | – | 0.72 | 0.62 | 0.42 | – | |
| | 70% | 0.60 | 0.58 | 0.44 | – | 0.71 | 0.69 | 0.52 | – | 0.72 | 0.70 | 0.52 | – | |
| Voltage | | 66-2/3% | 0.60 | 0.60 | 0.46 | 0.27 | 0.71 | 0.71 | 0.55 | 0.32 | 0.72 | 0.72 | 0.55 | 0.32 |

| Frequency of Applied Ripple Current | | 10kHz | | | | 40kHz | | | | 100kHz | | | | |
|-------------------------------------|------|------------------------------------|------|------|------|-------|------|------|------|--------|------|------|------|------|
| | | Ambient Still Air Temperature (°C) | | | | | | | | | | | | |
| | | ≤55 | 85 | 105 | 125 | ≤55 | 85 | 105 | 125 | ≤55 | 85 | 105 | 125 | |
| % of 85°C Rated Peak | 100% | 0.88 | 0.55 | – | – | 1.00 | 0.63 | – | – | 1.10 | 0.69 | – | – | |
| | 90% | 0.88 | 0.67 | – | – | 1.00 | 0.77 | – | – | 1.10 | 0.85 | – | – | |
| Voltage | 80% | 0.88 | 0.76 | 0.52 | – | 1.00 | 0.87 | 0.59 | – | 1.10 | 0.96 | 0.65 | – | |
| | 70% | 0.88 | 0.85 | 0.64 | – | 1.00 | 0.97 | 0.73 | – | 1.10 | 1.07 | 0.80 | – | |
| Voltage | | 66-2/3% | 0.88 | 0.88 | 0.68 | 0.40 | 1.00 | 1.00 | 0.77 | 0.45 | 1.10 | 1.10 | 0.85 | 0.50 |

1/ At 125°C the rated voltage of the capacitors decreases to 66 2/3 of the 85°C rated voltage.

2/ The peak of the applied ac ripple voltage plus the applied dc voltage must not exceed the dc voltage rating of the capacitors.

CECC Wet Electrolytic Tantalum Capacitor

CAPACITANCE AND RATED VOLTAGE, V_R (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

| Capacitance | | Rated Voltage DC (V_R) to 85°C | | | | | | |
|---------------|------|------------------------------------|-----|------|-----|------|------|------|
| μF | Code | 25V | 30V | 50V | 60V | 75V | 100V | 125V |
| 15 | 156 | | | | | | | A* |
| 22 | 226 | | | | | | A* | |
| 33 | 336 | | | | | A* | | |
| 47 | 476 | | | A* | | | | B* |
| 68 | 686 | A | | | | | B | |
| 100 | 107 | | | | B | B | | D |
| 120 | 127 | | | B | | | | D* |
| 150 | 157 | | | B | | | D | E |
| 220 | 227 | | B | | | D*,E | E | E |
| 330 | 337 | B | | D*,E | | E | E | |
| 470 | 477 | | | D,E | | E | | |
| 560 | 567 | D* | | | E | | | |
| 680 | 687 | E | D,E | E | | E | | |
| 750 | 757 | D,E | D,E | | | E | E* | |
| 1000 | 108 | D,E | E | D*,E | | | | |
| 1500 | 158 | E | | | | | | |
| 2200 | 228 | | | | E | | | |
| 3000 | 308 | | | E | | | | |
| 4700 | 478 | E | | | | | | |

Released codes

Engineering samples - please contact manufacturer

*Codes under development

CECC Wet Electrolytic Tantalum Capacitor

RATINGS & PART NUMBER REFERENCE

| AVX Part Number | Cap (µF) 25°C at 120Hz | DC Rated Voltage (V) at 85°C | ESR Max (ohms) at 120Hz | DC Leakage max (µA) | | TANG δ Max +25°C (%) | Impedance max (Ohms) -55°C at 120Hz | Maximum Capacitance Change (%) | | | AC Ripple (mA rms) 85°C at 40kHz | Case Size | | |
|---|------------------------------|------------------------------------|-------------------------------|---------------------|-----------------|-------------------------|---|-----------------------------------|-------|--------|--|-----------|------|--|
| | | | | +25°C | +85 & +125°C | | | -55°C | +85°C | +125°C | | AVX | DSCC | |
| 25 VDC at 85°C 15 VDC at 125°C | | | | | | | | | | | | | | |
| TWAA686*025□BEZO^00 | 68 | 25 | 2.5 | 0.6 | 3 | 12 | 45 | -40 | 12 | 15 | 850 | A | T1 | |
| TWAB337*025□BEZO^00 | 330 | 25 | 1.3 | 2 | 20 | 30 | 25 | -60 | 10 | 15 | 1550 | B | T2 | |
| TWAE687*025□BEZO^00 | 680 | 25 | 0.75 | 3 | 12 | 45 | 12 | -50 | 8 | 15 | 2100 | E | T4 | |
| TWAD757*025□BEZO^00 | 750 | 25 | 1 | 3 | 25 | 45 | 15 | -50 | 8 | 15 | 2000 | D | T3 | |
| TWAE757*025□BEZO^00 | 750 | 25 | 0.75 | 3.5 | 16 | 50 | 9 | -55 | 10 | 18 | 2200 | E | T4 | |
| TWAD108*025□BEZO^00 | 1000 | 25 | 1 | 4 | 30 | 45 | 15 | -50 | 8 | 15 | 2300 | D | T3 | |
| TWAE108*025□BEZO^00 | 1000 | 25 | 0.7 | 4 | 20 | 60 | 9 | -55 | 10 | 18 | 2400 | E | T4 | |
| TWAE158*025□BEZO^00 | 1500 | 25 | 0.5 | 6 | 24 | 65 | 7 | -65 | 15 | 20 | 2850 | E | T4 | |
| TWAE478*025□BEZO^00 | 4700 | 25 | 0.25 | 18 | 92 | 90 | 1.8 | -74 | 32 | 34 | 5700 | E | T4 | |
| 30 VDC at 85°C 20 VDC at 125°C | | | | | | | | | | | | | | |
| TWAB227*030□BEZO^00 | 220 | 30 | 2 | 1.9 | 10 | 15 | 30 | -40 | 8 | 15 | 1200 | B | T2 | |
| TWAD687*030□BEZO^00 | 680 | 30 | 1 | 3.3 | 25 | 45 | 15 | -50 | 8 | 15 | 1900 | D | T3 | |
| TWAE687*030□BEZO^00 | 680 | 30 | 0.8 | 4.5 | 18 | 45 | 10 | -60 | 8 | 15 | 2100 | E | T4 | |
| TWAD757*030□BEZO^00 | 750 | 30 | 1 | 3.6 | 30 | 45 | 15 | -50 | 8 | 15 | 2000 | D | T3 | |
| TWAE757*030□BEZO^00 | 750 | 30 | 0.8 | 5 | 20 | 45 | 10 | -65 | 10 | 18 | 2200 | E | T4 | |
| TWAE108*030□BEZO^00 | 1000 | 30 | 0.7 | 5 | 20 | 55 | 7 | -70 | 10 | 18 | 2500 | E | T4 | |
| 50 VDC at 85°C 30 VDC at 125°C | | | | | | | | | | | | | | |
| TWAA476*050□BEZO^00 | 47 | 50 | 2 | 1 | 5 | 9 | 35 | -25 | 8 | 15 | 850 | A | T1 | |
| TWAB127*050□BEZO^00 | 120 | 50 | 2 | 2 | 10 | 14 | 30 | -45 | 8 | 15 | 1200 | B | T2 | |
| TWAB157*050□BEZO^00 | 150 | 50 | 2 | 2 | 10 | 16 | 25 | -50 | 8 | 15 | 1400 | B | T2 | |
| TWAD337*050□BEZO^00 | 330 | 50 | 0.85 | 3 | 25 | 25 | 15 | -50 | 8 | 15 | 1650 | D | T3 | |
| TWAE337*050□BEZO^00 | 330 | 50 | 0.8 | 2.5 | 25 | 24 | 15 | -50 | 8 | 15 | 1900 | E | T4 | |
| TWAD477*050□BEZO^00 | 470 | 50 | 1 | 3 | 25 | 35 | 11 | -50 | 8 | 15 | 2100 | D | T3 | |
| TWAE477*050□BEZO^00 | 470 | 50 | 0.75 | 3 | 30 | 32 | 10 | -50 | 8 | 15 | 2200 | E | T4 | |
| TWAE687*050□BEZO^00 | 680 | 50 | 0.7 | 5 | 40 | 42 | 8 | -58 | 10 | 20 | 2750 | E | T4 | |
| TWAD108*050□BEZO^00 | 1000 | 50 | 1.2 | 15 | 125 | 100 | 15 | -90 | 100 | 140 | 3800 | D | T3 | |
| TWAE108*050□BEZO^00 | 1000 | 50 | 0.7 | 11 | 110 | 45 | 20 | -70 | 30 | 40 | 3200 | E | T4 | |
| TWAE308*050□BEZO^00 | 3000 | 50 | 0.3 | 30 | 150 | 80 | 3.5 | -80 | 60 | 85 | 3100 | E | T4 | |
| 60 VDC at 85°C 40 VDC at 125°C | | | | | | | | | | | | | | |
| TWAB107*060□BEZO^00 | 100 | 60 | 2.5 | 1.7 | 10 | 12 | 30 | -40 | 8 | 15 | 1100 | B | T2 | |
| TWAE567*060□BEZO^00 | 560 | 60 | 0.8 | 5 | 40 | 45 | 10 | -58 | 8 | 15 | 2750 | E | T4 | |
| TWAE228*060□BEZO^00 | 2200 | 60 | 0.5 | 30 | 150 | 80 | 3.5 | -80 | 60 | 85 | 3000 | E | T4 | |
| 75 VDC at 85°C 50 VDC at 125°C | | | | | | | | | | | | | | |
| TWAA336*075□BEZO^00 | 33 | 75 | 2.5 | 1 | 5 | 8 | 66 | -25 | 5 | 9 | 1050 | A | T1 | |
| TWAB107*075□BEZO^00 | 100 | 75 | 2.5 | 2 | 10 | 12 | 24 | -35 | 6 | 10 | 1400 | B | T2 | |
| TWAD227*075□BEZO^00 | 220 | 75 | 1.2 | 3 | 30 | 24 | 20 | -45 | 6 | 10 | 1500 | D | T3 | |
| TWAE227*075□BEZO^00 | 220 | 75 | 1.1 | 2.5 | 30 | 22 | 20 | -50 | 6 | 10 | 1800 | E | T4 | |
| TWAE337*075□BEZO^00 | 330 | 75 | 1 | 3 | 40 | 30 | 12 | -50 | 6 | 10 | 2200 | E | T4 | |
| TWAE477*075□BEZO^00 | 470 | 75 | 0.9 | 5 | 50 | 38 | 12 | -55 | 6 | 10 | 2750 | E | T4 | |
| TWAE687*075□BEZO^00 | 680 | 75 | 0.9 | 11 | 110 | 45 | 10 | -70 | 30 | 40 | 2750 | E | T4 | |
| TWAE757*075□BEZO^00 | 750 | 75 | 0.7 | 12 | 120 | 60 | 10 | -70 | 30 | 40 | 3800 | E | T4 | |
| 100 VDC at 85°C 65 VDC at 125°C | | | | | | | | | | | | | | |
| TWAA226*100□BEZO^00 | 22 | 100 | 3.5 | 1 | 5 | 7 | 125 | -18 | 3 | 10 | 1400 | A | T1 | |
| TWAB686*100□BEZO^00 | 68 | 100 | 2.5 | 2 | 10 | 13 | 37 | -30 | 4 | 12 | 1650 | B | T2 | |
| TWAD157*100□BEZO^00 | 150 | 100 | 1.6 | 3 | 25 | 22 | 22 | -35 | 6 | 12 | 2100 | D | T3 | |
| TWAE227*100□BEZO^00 | 220 | 100 | 1.2 | 5 | 50 | 24 | 15 | -40 | 6 | 12 | 2750 | E | T4 | |
| TWAE337*100□BEZO^00 | 330 | 100 | 0.8 | 6 | 60 | 30 | 10 | -45 | 7 | 20 | 3600 | E | T4 | |
| TWAE757*100□BEZO^00 | 750 | 100 | 0.7 | 20 | 200 | 45 | 10 | -40 | 20 | 50 | 6700 | E | T4 | |
| 125 VDC at 85°C 85 VDC at 125°C | | | | | | | | | | | | | | |
| TWAD107*125□BEZO^00 | 100 | 125 | 1.8 | 3 | 25 | 18 | 35 | -35 | 5 | 12 | 2100 | D | T3 | |
| TWAE157*125□BEZO^00 | 150 | 125 | 1.6 | 5 | 50 | 35 | 20 | -35 | 6 | 16 | 2750 | E | T4 | |
| TWAE227*125□BEZO^00 | 220 | 125 | 1.4 | 10 | 50 | 25 | 12 | -40 | 8 | 15 | 3600 | E | T4 | |

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes.

NOTE: AVX reserves the rights to supply higher voltage rating in the same case size, to the same reliability standards.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренеспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru