TWA-E Series

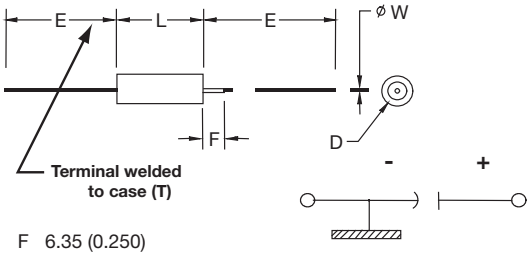
CECC Wet Electrolytic Tantalum Capacitor

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



F 6.35 (0.250)
W 0.64 +0.05
(.025 +.002)
T 2.380 (.094)

CASE DIMENSIONS: millimeters (inches)

DSCC Case Size	AVX Case Size	L +0.79 (0.031) -0.41 (0.016)	D Without Insulating Sleeve ±0.41 (0.016)	D With Insulatiing Sleeve Max	E ±6.35 (0.250)
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 -55ºC to 125ºC)

Voltage (DC)								
Rated Voltage: (V_R)	85ºC	25	30	50	60	75	100	125
Derated Voltage: (V_C)	125ºC	15	20	30	40	50	65	85
Surge Voltage: (V_S)	85ºC	28.8	34.5	57.5	69	86.3	115	144

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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	**Inspecition 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

RoHS COMPLIANT

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	100%	0.60	0.39	–	–	0.71	0.43	–	–	0.72	0.45	–	–
85°C	90%	0.60	0.46	–	–	0.71	0.55	–	_	0.72	0.55	–	–
Rated	80%	0.60	0.52	0.35	–	0.71	0.62	0.42	–	0.72	0.62	0.42	–
Peak	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	100%	0.88	0.55	–	–	1.00	0.63	–	–	1.10	0.69	–	–
85°C	90%	0.88	0.67	–	–	1.00	0.77	–	_	1.10	0.85	–	–
Rated	80%	0.88	0.76	0.52	–	1.00	0.87	0.59	–	1.10	0.96	0.65	–
Peak	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.

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

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RATINGS & PART NUMBER REFERENCE

AVX Part Number	Cap (µF) 25ºC at 120Hz	DC Rated Votage (V) at 85ºC	ESR Max (ohms) at 120Hz	DC Leakage max (µA)		TANG δ Max +25ºC (%)	Impedance max (Ohms) -55ºC at 120Hz	Maximum Capacitance Change (%)			AC Ripple (mA rms) 85ºC at 40kHZ	Case Size	
				+25ºC	+85 & +125ºC			-55ºC	+85ºC	+125ºC		AVX	DSCC
25 VDC at 85°C 15 VDC at 125°C													
TWAA686*025□BEZ0^00	68	25	2.5	0.6	3	12	45	-40	12	15	850	A	T1
TWAB337*025□BEZ0^00	330	25	1.3	2	20	30	25	-60	10	15	1550	B	T2
TWAE687*025□BEZ0^00	680	25	0.75	3	12	45	12	-50	8	15	2100	E	T4
TWAD757*025□BEZ0^00	750	25	1	3	25	45	15	-50	8	15	2000	D	T3
TWAE757*025□BEZ0^00	750	25	0.75	3.5	16	50	9	-55	10	18	2200	E	T4
TWAD108*025□BEZ0^00	1000	25	1	4	30	45	15	-50	8	15	2300	D	T3
TWAE108*025□BEZ0^00	1000	25	0.7	4	20	60	9	-55	10	18	2400	E	T4
TWAE158*025□BEZ0^00	1500	25	0.5	6	24	65	7	-65	15	20	2850	E	T4
TWAE478*025□BEZ0^00	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□BEZ0^00	220	30	2	1.9	10	15	30	-40	8	15	1200	B	T2
TWAD687*030□BEZ0^00	680	30	1	3.3	25	45	15	-50	8	15	1900	D	T3
TWAE687*030□BEZ0^00	680	30	0.8	4.5	18	45	10	-60	8	15	2100	E	T4
TWAD757*030□BEZ0^00	750	30	1	3.6	30	45	15	-50	8	15	2000	D	T3
TWAE757*030□BEZ0^00	750	30	0.8	5	20	45	10	-65	10	18	2200	E	T4
TWAE108*030□BEZ0^00	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□BEZ0^00	47	50	2	1	5	9	35	-25	8	15	850	A	T1
TWAB127*050□BEZ0^00	120	50	2	2	10	14	30	-45	8	15	1200	B	T2
TWAB157*050□BEZ0^00	150	50	2	2	10	16	25	-50	8	15	1400	B	T2
TWAD337*050□BEZ0^00	330	50	0.85	3	25	25	15	-50	8	15	1650	D	T3
TWAE337*050□BEZ0^00	330	50	0.8	2.5	25	24	15	-50	8	15	1900	E	T4
TWAD477*050□BEZ0^00	470	50	1	3	25	35	11	-50	8	15	2100	D	T3
TWAE477*050□BEZ0^00	470	50	0.75	3	30	32	10	-50	8	15	2200	E	T4
TWAE687*050□BEZ0^00	680	50	0.7	5	40	42	8	-58	10	20	2750	E	T4
TWAD108*050□BEZ0^00	1000	50	1.2	15	125	100	15	-90	100	140	3800	D	T3
TWAE108*050□BEZ0^00	1000	50	0.7	11	110	45	20	-70	30	40	3200	E	T4
TWAE308*050□BEZ0^00	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□BEZ0^00	100	60	2.5	1.7	10	12	30	-40	8	15	1100	B	T2
TWAE567*060□BEZ0^00	560	60	0.8	5	40	45	10	-58	8	15	2750	E	T4
TWAE228*060□BEZ0^00	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□BEZ0^00	33	75	2.5	1	5	8	66	-25	5	9	1050	A	T1
TWAB107*075□BEZ0^00	100	75	2.5	2	10	12	24	-35	6	10	1400	B	T2
TWAD227*075□BEZ0^00	220	75	1.2	3	30	24	20	-45	6	10	1500	D	T3
TWAE227*075□BEZ0^00	220	75	1.1	2.5	30	22	20	-50	6	10	1800	E	T4
TWAE337*075□BEZ0^00	330	75	1	3	40	30	12	-50	6	10	2200	E	T4
TWAE477*075□BEZ0^00	470	75	0.9	5	50	38	12	-55	6	10	2750	E	T4
TWAE687*075□BEZ0^00	680	75	0.9	11	110	45	10	-70	30	40	2750	E	T4
TWAE757*075□BEZ0^00	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□BEZ0^00	22	100	3.5	1	5	7	125	-18	3	10	1400	A	T1
TWAB686*100□BEZ0^00	68	100	2.5	2	10	13	37	-30	4	12	1650	B	T2
TWAD157*100□BEZ0^00	150	100	1.6	3	25	22	22	-35	6	12	2100	D	T3
TWAE227*100□BEZ0^00	220	100	1.2	5	50	24	15	-40	6	12	2750	E	T4
TWAE337*100□BEZ0^00	330	100	0.8	6	60	30	10	-45	7	20	3600	E	T4
TWAE757*100□BEZ0^00	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□BEZ0^00	100	125	1.8	3	25	18	35	-35	5	12	2100	D	T3
TWAE157*125□BEZ0^00	150	125	1.6	5	50	35	20	-35	6	16	2750	E	T4
TWAE227*125□BEZ0^00	220	125	1.4	10	50	25	12	-40	8	15	3600	E	T4

All technical data relates to an ambient temperature of +25ºC. 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 «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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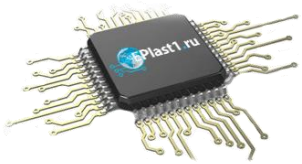
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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